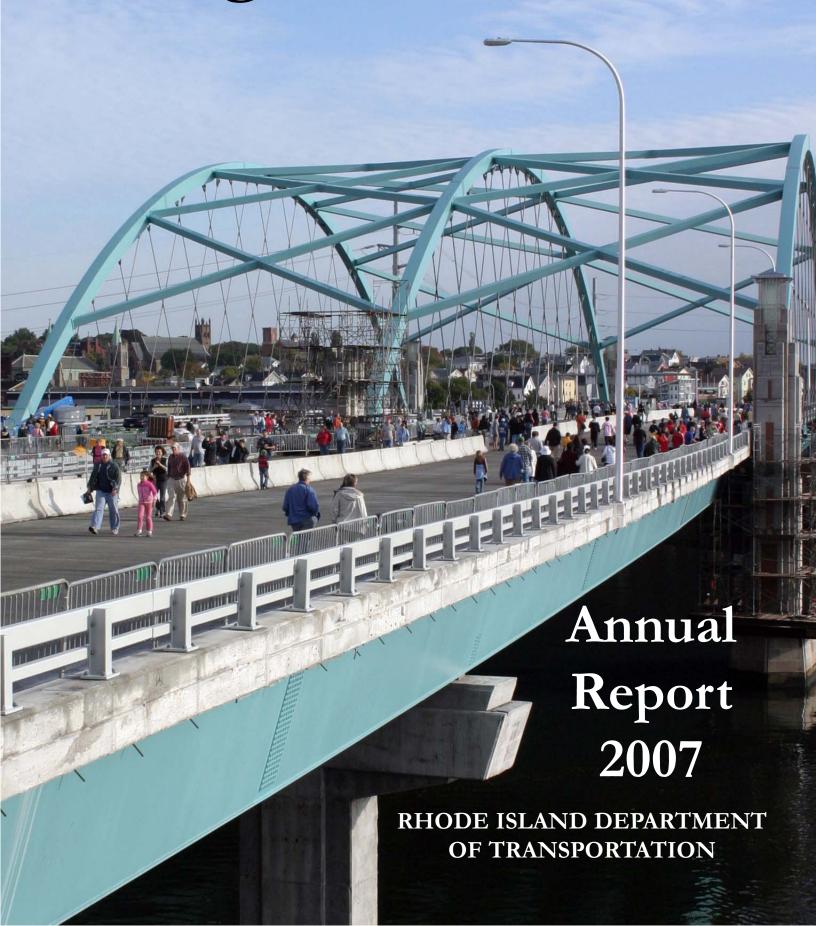
## Putting Customers First



## **Table of Contents**

Message from the Director	3
RIDOT Organizational Chart	4
The Faces of RIDOT	5
RIDOT Offices & Facilities	6
RIDOT Maintenance Facilities	7
Major Projects:	
Iway (I-195 Relocation)	8
Washington Bridge Replacement Project	12
India Point Park Pedestrian Bridge	13
Sakonnet River Bridge Replacement Project	14
Relocation of Route 403	16
Commuter Rail	
Bicycle and Pedestrian Improvements	20
Division Reports:	
Administrative Services	
Overview	22
Contract Administration	
Office of Business and Community Resources	25
Office on Highway Safety	
Construction Management	28
Customer Service	29
Design	
Bridge	
Road	
Traffic	34
DoIT/GIS	36
Environmental	37
Highway & Bridge Maintenance	
Intermodal Planning	
Landscape Architecture	
Public Affairs	
Real Estate	
Research and Technology	
Transportation Management Center (TMC)	
Phone Directory	
Photo & Image Credits	
RIDOT Quick Facts	49

## Message from the Director

The Rhode Island Department of Transportation is no different than thousands of governmental agencies across the country that are managing their limited resources and a growing demand of projects for building and maintaining transportation infrastructure. RIDOT is meeting this challenge head-on, tackling projects essential to the viability of the State's roads and bridges while moving forward with new projects aimed at enhancing safety, reducing congestion, and improving efficiency.

With an annual budget of \$350 million, it goes without saying that fiscal integrity, accountability and customer service are top priorities at RIDOT.

The Department has had many success stories in the past year which are chronicled in this Annual Report. As we look back on all RIDOT accomplished in 2007, we look forward to a busy 2008. Ongoing projects include the Iway project in Providence, the construction of a new limited access highway in South County, and construction of commuter rail stations in Warwick and Wickford. RIDOT also is aggressively working to rehabilitate and maintain some 770 bridges in its inventory, including starting projects to replace some of its largest and most heavily travelled bridges such as the Sakonnet River Bridge, the Pawtucket River Bridge and the Providence River Bridge.

As impressive as RIDOT's largest projects are, equally impressive is the diversity of projects the Department has under its authority. I invite you to explore this Annual Report to learn more about the Department's work and the people who make it all possible. The hard working men and women at RIDOT are committed to serving the public, getting the job done right, and providing motorists with the finest transportation system possible.



RIDOT Director Michael P. Lewis speaking at the Washington Bridge project in Providence.

#### **Boards & Commissions**

RIDOT's Director serves as a member of the following boards and commissions:

R.I. Turnpike & Bridge Authority R.I. Public Transit Authority I-195 Redevelopment Board Growth Planning Council

State Traffic Commission

## RIDOT Organizational Chart

Janke Hill Lauredales & GOVERNOR OFFICE OF THE DONALD L. CARCIERI DIRECTOR Public Affairs Dana A. Nolfe, Chief DEPARTMENT Customer Service OF TRANSPORTATION Lori A. Capaldi, Chief Executive Counsel Lisa Martine II. Esq. Michael Peter Lewis Inspector General Director Richard G. Fondi Legislative Liaison Bernard Frezza, Jr. William Chuck Alves on Barriell Print Works Deputy Director Boards and **EXECUTIVE STAFF** Commissions. Administrative. Services Financial. Project Management Highway & Bridge Transportation Management Maintenance Support Acting Chief Engineer Phillip Kydd. Assistant Director Marc A Leonetti. Kazem Farhoumand, P.E. David J. Sasso. Namvär Moghadam, Associate Director Administrator Administrator Administrative. External CRP (DOT) Van essa Crum Design Audit & Final Review Kazem Farhoumand, P.E. DOA DOIT Construction Mary E. Gelardi, Real Estate Management Administrator Frenk Corrao III, P.E. Fleet Management Materials DOA Human Resources - Survey Paul E. Pysz, Health & Safety Administrator Environmental J. M. Bennett, P.E. Intermodal Planning · Research & Technology Stephen A. Devine Capital Projects Traffic Management R. Shewver, P.E. P.R. Annarummo, P.E. Managing Engineer Sparre Cont. stand

#### The Faces of RIDOT



Michael P. Lewis Director



William "Chuck" Alves **Deputy Director** 



**Dana Alexander Nolfe** Chief **Public Affairs** 



Paul R. Annarummo **Managing Engineer Traffic Management** 



J. Michael Bennett **Director Environmental** 



Lori A. Capaldi Chief **Customer Service** 



Frank Corrao III **Deputy Chief** Construction



Vanessa Crum Administrative **External CRP** 



Stephen A. Devine Chief Intermodal Planning



Kazem Farhoumand **Acting Chief Engineer Project Management** 



Richard G. Fondi Inspector General



Legislative Liaison Bernard Frezza, Jr.



Mary E. Gelardi Administrator DoIT



Phillip Kydd **Assistant Director** 



Marc A. Leonetti **Associate Director** Administrative Services Financial Management



Lisa M. Martinelli, Esq. **Executive Counsel** 



Namvar Moghadam Administrator Maintenance



Paul E. Pysz Administrator **Human Resources** 



David J. Sasso Administrator **Transportation Support** 



**Robert Shawver Capitol Projects** 

## **RIDOT Offices and Facilities**

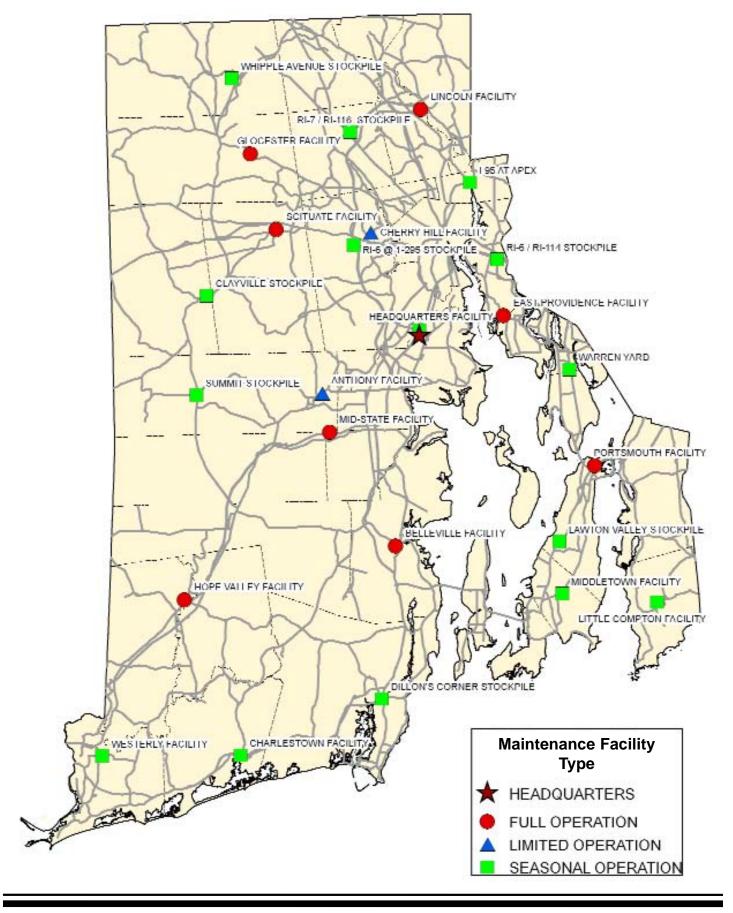


Above, RIDOT's main office is located at Two Capitol Hill in Providence, directly across the street from the State House. Below, two of the Highway & Bridge Maintenance Department's largest facilities. At left, its headquarters building in Warwick. At right, its Midstate Facility off I-95 on the East Greenwich/Coventry line.





#### **RIDOT Maintenance Facilities**



## Iway (I-195 Relocation) Project

The Iway, or I-195 Relocation Project, is one of RIDOT's largest projects ever and will result in major changes to two Interstate highways in Providence. In addition to improving the design and making safety improvements along I-95 and I-195, the project will significantly impact the skyline of

Providence and provide opportunities for significant redevelopment in the downtown and surrounding areas.

The Iway will feature one mile of new I-195 along a new alignment from the Washington Bridge to the I-95 and I-195 interchange, 1.5 miles of reconstructed I-95 from Thurbers Avenue to Broadway, a new interchange between the two Interstates and new bridge and ramp structures.

As of early 2008, the \$610 million project was about 65 percent complete. Since the inception of the project, the Department has always tried to mitigate the traffic impacts to

motorists. This past year, construction more directly impacted live traffic, especially so with the biggest project milestone of the year. In November 2007, RIDOT opened one of the four major movements in the interchange, connecting I-95

North to I-195 East.

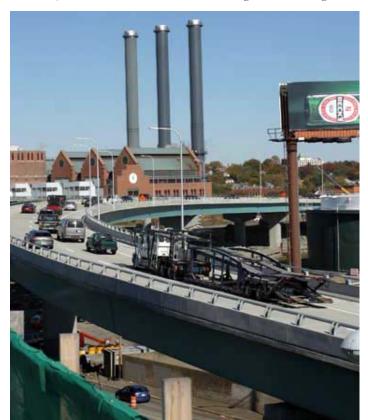
Before the Iway was opened, congestion from I-195 routinely affected I-95, causing significant delays on I-95 North and South. By the end of the first week of the Iway being open, congestion was markedly reduced on I-95 South. The

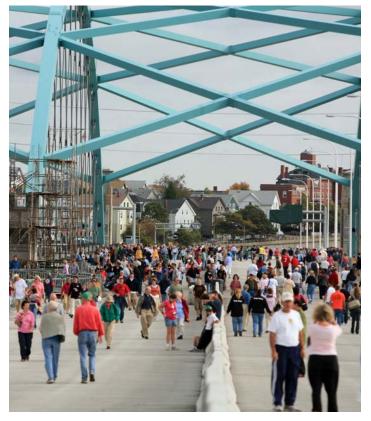
Iway resulted in a dramatic improvement in traffic congestion for those traveling on I-95 North, especially during the evening commute. A typical afternoon on I-95 North had involved about two miles of stop and go traffic leading up to the old exit for I-195 East. Since the Iway opened, this congestion has been greatly reduced. The morning commute also has seen a reduction in congestion for travelers on I-95 North.

RIDOT realized many other successes for the Iway in 2007. These began in April with construction of the ramp that will take motorists on I-195 West to I-95 South. In

order to place beams for this new ramp, RIDOT had to close one or both sides of the Interstate. The closures were done during the late evening and overnight hours when traffic was lightest, and each day all lanes were reopened prior to the





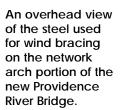


Above left, traffic flows freely on the first section of the Iway to open, connecting I-95 North to I-195 East. Above right, thousands of people crowd the new Providence River Bridge during a public walk on October 20, 2007, just a few weeks before the bridge opened to traffic. At top, one of six decorative light towers built on each end of the bridge.

morning commute.

RIDOT employed a large public education campaign, including the use of print and broadcast advertising, bolstered by well-signed detours. Some of the detours involved the use of city streets and RIDOT worked with State and local police to keep traffic moving. The closures went off without a hitch with minimal congestion, mostly in the first half hour of a closure. RIDOT applied the same formula in July with the overhead setting of beams for the new ramp from I-95 South to I-195 East. Again, traffic backups only occurred at the beginning of a closure and traffic flowed smoothly on the detour routes.

Leading up to the opening of the first Iway ramp in November, RIDOT took a number of steps to inform the public about the new highway configuration. Lead by the Department's Public Affairs division, RIDOT declared October 2007 as "Iway October." The centerpiece event











During overnight hours, RIDOT shut down I-95 in Providence for several nights in 2007 to build new ramps for the Iway. At left, a crane lifts a beam under a full moon. Middle right, a crane positioned on the highway lowers a beam into place. At bottom right, a worker inspects a transporter assembly used to "drive" a large steel bent onto the highway.

## Iway (I-195 Relocation) Project

involved the organization of a public walk on the Iway and the new Providence River Bridge.

The public walk was hugely successful, with an estimated 10,000 people visiting the Iway during a three-hour span of time. The chance to walk on the highway before it opened was so attractive that visitors began lining up one hour before the event's stated starting time.

RIDOT worked with the Rhode Island Public Transit Authority to establish two satellite parking areas and bus visitors to the event site. As the end time for the event drew near, RIDOT decided to extend it for one hour as visitors were still coming to the lots to catch a shuttle bus. People marveled at the view of the Providence River and the Providence skyline, taking photos of the picturesque land-scape as well as the new Providence River Bridge, which was assembled 12 miles away in Quonset Point and floated up Narragansett Bay in 2006.

RIDOT expects many more changes in Providence due to Iway construction in 2008. These include the closing of old ramps and opening of new ones. Perhaps the most anticipat-

ed opening will be the ramp from I-95 South to I-195 East in Fall 2008. Congestion on the existing ramp leads to extensive traffic delays, backing up considerably on I-95 South. The new ramp will begin further south of the existing one, and be a more traditional right-hand exit as opposed to the current left-hand exit.

More than simply moving the location of the ramps, the Iway is successful because it has fewer exits, the exits are more evenly spaced (resulting in a reduction in congestion due to tight weaves), and there is added capacity with lanes and shoulders that meet today's traffic demands.

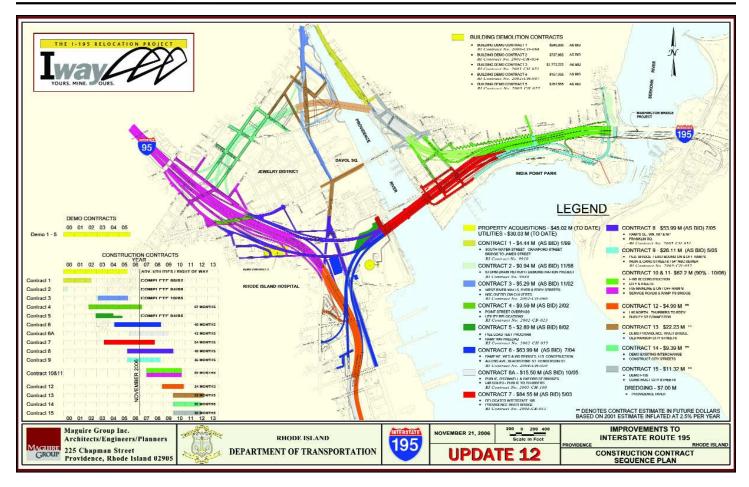
RIDOT does not expect the Iway to eliminate all highway congestion in Providence since adverse weather and accidents always can cause traffic tie ups.

The entire project remains on schedule, with all traffic using the new highway in late 2009. By 2012 the project will be complete. This includes demolition of old highway structures and preparing the land under them for redevelopment and new public parks.

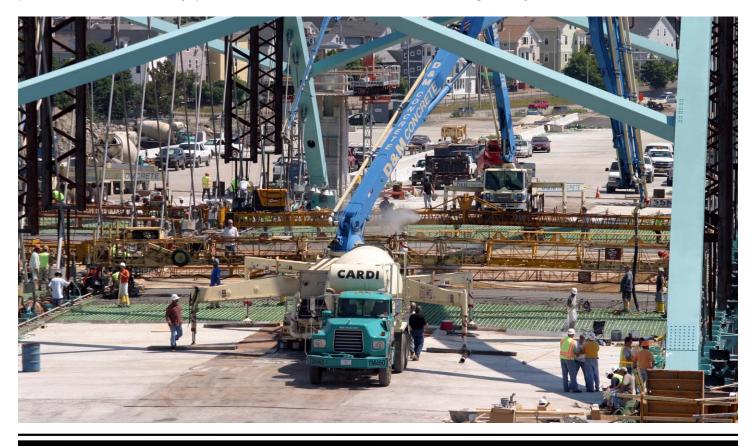


The dedication of the Iway on October 26 drew local, state and federal officials for the celebration. Cutting a cake above, from left, are former RIDOT Director Jerome F. Williams, Providence Mayor David Cicilline, Governor Donald L. Carcieri, former FHWA Administrator J. Richard Capka, U.S. Senator Jack Reed, and FHWA-RI Division Administrator Peter W. Osborn. Below, Secretary of State A. Ralph Mollis, U.S. Rep. James Langevin, Reed, Cicilline, Carcieri, Capka, Williams, General Treasurer Frank Caprio, Osborn, and RIDOT Deputy Chief Engineer Frank Corrao III cut a ribbon to mark the opening of the new Providence River Bridge.





Above, the construction sequencing map shows the many contracts involved in building the Iway. The left side includes a construction timeline and the right side lists the actual and estimated costs of each contract. Below, Cardi Corporation, the prime contractor for the Iway, pours the deck of the new Providence River Bridge in July 2007.



11

## **Washington Bridge**

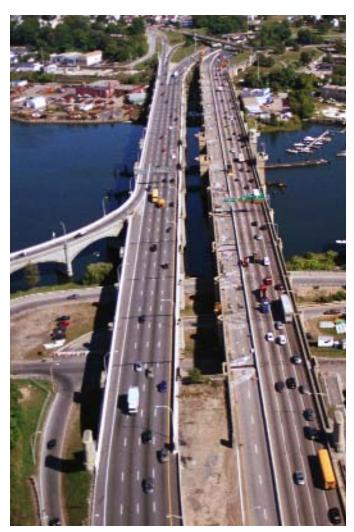
The replacement of the Washington Bridge carrying I-195 Eastbound often is confused with the Iway project since it is located just to the east of the Iway. What it shares in common though is the promise of improved infrastructure and easier and safer commutes to the East Bay area of Rhode Island.

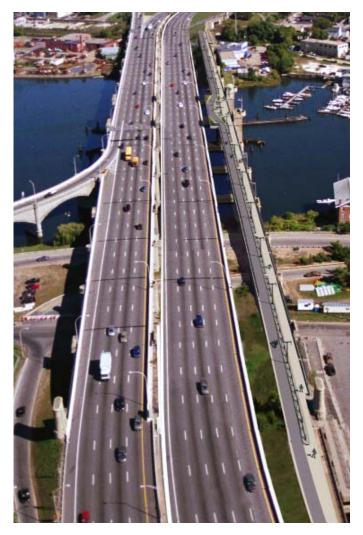
The bridge replaces a 75-year-old structure that was showing signs of advanced deterioration. Given the high traffic volumes (approximately 150,000 vehicles per day), poor condition of the concrete and the estimated cost of a seismic retrofit, RIDOT announced that it would replace the bridge. Designed to meet modern structural and seismic standards, the new bridge will be made of concrete and steel.

Fortunately there was a large enough gap between the east-bound and westbound bridges that RIDOT was able to construct the first phase of a new bridge between the two structures without impeding traffic. The second phase of the \$42 million project is ongoing, with final completion expected in 2009.

RIDOT has maintained the same number of travel lanes in this phase of the project with the exception of periodic lanes closures. The lanes have been narrowed while RIDOT continues building onto the new bridge to make it wider. When complete, the bridge will accommodate five lanes of travel with three through lanes and two exit lanes (one for Exit 4 and one for Exit 5).

Once the project concludes, RIDOT will seek bids for a project to turn a portion of the old bridge into a linear park and bikeway bridge to carry the East Bay Bike Path from Veterans Memorial Parkway in East Providence to India Point Park. The existing bridge had a narrow path separated from vehicular traffic, but was closed in 2007 as part of construction of the bridge. The new structure will be separated from the highway, making for a more pleasurable riding experience. It will include an 11-foot wide bike path and a 7-foot wide pedestrian walkway with a sweeping view of the Providence harbor.





The image at left shows the Washington Bridge at the start of the project. At right, a rendering of how the project will look when completed. Since the first picture at left was taken, RIDOT has opened a new bridge section.

## India Point Pedestrian Bridge

Another major project next door to the Iway is the construction of a new India Point Park Pedestrian Bridge. The footbridge connects the waterfront at India Point Park with the Fox Point neighborhood and the East Side of Providence.

RIDOT expects the bridge to open in mid 2008. It replaces a much narrower bridge in the same location. RIDOT had to remove the old bridge because its piers would have obstructed the lane configuration for the Iway.

The project had been delayed about nine months. This was due in part to the Department's efforts to save a large caliper tree on the Fox Point side of the bridge. Additionally, RIDOT found the construction of the heavily reinforced southern end of the bridge more complicated than expected.

The new bridge is five times wider, and includes benches and raised beds for the planting of flowers, shrubs and small trees. The southern end of the bridge will feature a staircase and a serpentine ramp system to allow handicapped persons to use the bridge. The entire structure will be illuminated as well, making it a safer resource for those who use it.

Also part of the project is construction at India Point Park itself, including moving India Street away from the park to provide additional parking and more trees and landscaping. RIDOT will build landscaped islands to help buffer the park from traffic using the new India Street on- and off-ramps, which will replace the existing ramps to and from Gano Street for motorists traveling on I-195 East.



Above, a computer-generated image of the India Point Park Pedestrian Bridge looking west. Another computer-generated image, below, shows the areas for landscaping on the bridge as well as the landscaped stair and ramp system in India Point Park.



## Sakonnet River Bridge

Along with the Iway, the replacement of the Sakonnet River Bridge is one of RIDOT's largest projects. The 51-year-old span is in need of extensive rehabilitation and RIDOT has determined it actually would be less expensive (and less disruptive to motorists) to replace it.

Given limited State and Federal resources, RIDOT in 2007 initiated a 60-day review of the project to identify areas for savings. The result was a determination that up to \$34 million could be trimmed from recent project estimates. Actual savings will vary depending on which type of materials RIDOT chooses to build the bridge with, as well as the final construc-



Above, an aerial view of the existing Sakonnet River Bridge. Below, a computer rendering of the new bridge, which RIDOT expects to open in 2011. Inset, right, a view of one of the bridge's proposed architectural details at sunset.

tion estimates and bid values. RIDOT is using two design alternatives with steel beams, another with concrete beams - and will bid both options. The purpose of having dual designs is to guard against rising materials costs and allow RIDOT



choose the most financially attractive option. The bid process should start in mid 2008.

A major area of savings was a decision to lower the profile of the bridge and build a large embankment for the eastern approach, reducing approximately 470 feet of elevated roadway over land. RIDOT was able to retain many of the key features of the bridge, including number and width of lanes and a planned bike path along its northern edge. The project also calls for a parking area and a boat ramp on the Tiverton side of the bridge.

In 2007, RIDOT completed demolition of an abandoned railroad bridge just to to the north of the vehicular bridge. This included the use of controlled explosive demolition of the rail bridge's piers in February. Also in 2007, RIDOT continued work on the Main Road Bridge, just to the east of the Sakonnet River Bridge on the Tiverton side.

For much of the past year RIDOT conducted a test pile



driving program to help determine the best type of supports to use for the bridge. Given experience gained from the construction of the Jamestown-Verrazzano Bridge in the late 1980s and early 1990s, RIDOT believed significant savings in terms of cost and project schedule could be realized through the test pile program as opposed to testing different types of piles during the construction contract. RIDOT now has a firm understanding of the type and depth of piles needed for the bridge.

The new bridge will be built just to the south of the exist-

ing bridge, which carries Route 24 over the Sakonnet River, connecting Tiverton and Newport. The bridge is a vital transportation link for the region as well, and serves residents, businesses and tourists driving to Newport and across Southeastern New England. The bridge carries approximately 40,000 vehicles per day, more than the other two bridges serving Aquidneck Island combined.

RIDOT expects to open the new span in 2011. The following year the Department anticipates demolition of the old span and completion of the project.





As part of the Sakonnet River Bridge Replacement Project, RIDOT removed an old railroad bridge just to the north of the vehicular bridge. The photos above show a large concrete pier for the train bridge before (left) and after (right) RIDOT used controlled explosive demolition charges to remove it.





Above left, a view of the existing Sakonnet River bridge from Riverview Avenue in Tiverton. Above right, a computerenhanced image showing the same view with RIDOT's latest design for the bridge, which reduces the length of bridge deck by building a large earthen berm. This change alone represents a savings of approximately \$15 million.

## Route 403 Relocation Project

A new limited access highway under construction for several years is nearing completion, fulfilling the promise of direct highway access for one of the state's largest industrial parks.

During 2007, the Route 403 Relocation Project was a beehive of activity, with work taking place in several areas along the highway that extends from Route 4, a limited access highway a short distance south of I-95. RIDOT expects the new highway to be opened to traffic in mid to late 2008, with final completion of the project in 2009.

Even in the dead of winter in January 2007, workers were busy on the project with the setting of beams for a bridge over an active Amtrak rail line. By year's end the bridge was substantially complete.

Throughout the course of 2007 work took place on numerous bridges within the project area including rehabilitation of an existing bridge over Route 4 and construction of a new bridge over Frenchtown Road (Route 402) in East Greenwich, close to the new interchange with Route 4.

The project to date has caused little disruption to motorists as most of it was constructed off-alignment. The closure of a popular off-ramp to Frenchtown Road was alleviated by using already constructed ramps and temporary detour roads.

The 4.5-mile highway extends south and east toward Post Road (U.S. Route 1) and into the Quonset Business Park in North Kingstown.

The park is the site of two former Navy bases, and now home to a rapidly developing 3,000-acre industrial park. The highway will replace a two-lane road that passes through a residential area.

In 2007 work also progressed on a new ramp that should ease traffic on Route 1, which is North Kingstown's primary commercial district. The new Route 403 will include an on-





(U.S. Route 1) and into the Quonset Greenwich. Bottom photo, the new highway takes shape next to Amtrak's rail line.

ramp from Route 4 North whereas the existing interchange does not. This will provide a better means of access for trucks and other park-bound traffic than the current primary alternative from the south, that being sections of Route 1 which include both windy, suburban sections and a busy commercial district.

Construction of the \$175 million project was split into two

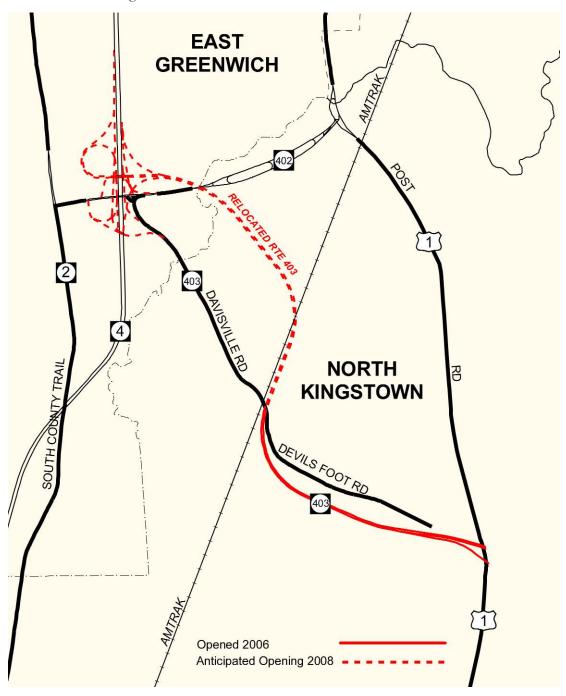
major phases with the first segment encompassing the south-eastern end of the road, a new interchange with Route 1 and a reconfiguration of access roads in the industrial park. Most contract segments are substantially complete. This phase also included the construction of a new transfer station for the Town of North Kingstown, as the former transfer station was in the path of the new highway.

The second phase of the project includes the new interchange with Route 4, the aforementioned Amtrak and Frenchtown Road bridges, as well as another bridge of Amtrak to carry local traffic on the old Route 403 near the point where the two phases of the project will meet.

In total, more than a dozen bridges were constructed or

rehabilitated. The entire length of the highway and all interchanges will be heavily landscaped with larger-than normal caliper trees planted to make a more immediate impact than smaller nursery stock would.

The project will be done about four years earlier than expected. In 2004, RIDOT decided to use Grant Anticipated Revenue Vehicle (GARVEE) bonds to accelerate work on this project and four other major road and bridge projects in Rhode Island. If not for this initiative – which allows debt on these projects to be repaid through an allocation of yearly Federal highway aid reimbursement – Route 403 and other much-needed projects would have been delayed.



The map above shows the layout of the new Route 403 with new roadway in red.

#### **Commuter Rail**

RIDOT continues to work on projects that will establish instate commuter rail service by both collaborating with other Federal and State agencies on the actual stations and the agreements that will establish service.

Rhode Island's commuter rail service is provided by the

Massachusetts Bay Transportation Authority (MBTA) and serves Providence with 28 stops per day on a line extending north to Boston. RIDOT anticipates establishing a service agreement with the MBTA to extend that current service south to Warwick and Wickford, where stations are planned.

RIDOT has had a long, successful relationship with the MBTA dating back to 1988 with the formation of the Pilgrim Partnership. This agreement cleared the way for the MBTA to extend

its service to Providence. Over the ensuing years RIDOT and the MBTA have worked to add more trips to Providence (including weekend service), and the two agencies worked to create a layover facility in Pawtucket in 2006. This area will serve as a staging area for trains that will begin their first runs of the day in Rhode Island.

RIDOT also is working with Amtrak to finalize an access agreement for use of MBTA trains on Amtrak's Northeast

Corridor.

RIDOT favors commuter rail as a means of reducing traffic volumes on the highways. There are no plans to widen existing highways and even if there were, such a project would be extremely expensive. Traffic volumes on I-95 range

from 150,000 to 260,000 vehicles in the day from Warwick into Providence. Traffic volumes on Route 4 have steadily increased over the past several years and the station in Wickford would help reduce volumes on that stretch of highway which range from 54,000 to 84,000 vehicles per day.

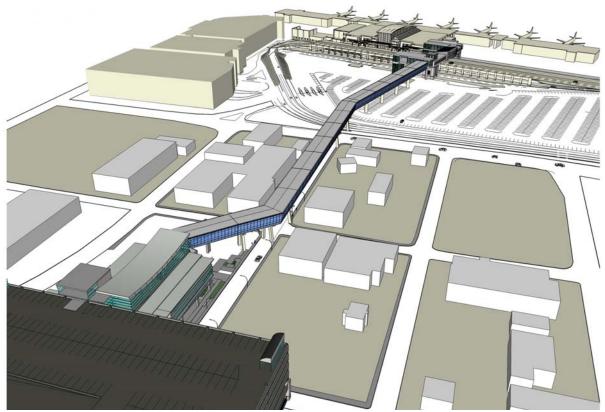
Construction of the Warwick Intermodal Station is being overseen by the Rhode Island Airport Corporation (RIAC), which operates the nearby T.F. Green State Airport. The proposed rail

station is so close that when built it will be the closest Amtrak rail-to-airport connection in the United States.

The \$222.5 million project includes the station, a consolidated rental car facility, a bus hub for local and intercity buses, a parking garage to accommodate both the rental car fleets (2,200 spaces) and commuter rail passengers (1,000 spaces).

A unique aspect of the project is a 1,300-foot, elevated, enclosed skywalk with moving sidewalks that will connect to

The illustrations on this page depict the components of the Warwick Intermodal Station. At top, a view of the station facade. Bottom, an aerial image showing the station in the foreground and the airport terminal in the background, connected by the 1,300-foot long elevated skywalk.





The rendering above depicts the Wickford Junction commuter rail station and parking garage.

the airport to the train station. Along with providing rail service, the station provides a chance for significant economic development for Warwick. The station sits in the 70-acre Warwick Station Redevelopment District, which the City envisions being developed with hotels, restaurants and retail uses.

The Wickford station would be located close to the site of a historic rail station called Wickford Junction in North Kingstown. The station has easy access to Route 4 and is a short drive for commuters from the most densely developed portions of South County.

RIDOT anticipates construction on both stations to begin in the coming year with rail service beginning in 2011.

In the future, commuter rail service could expand with more stops and possibly extend further south in Rhode Island. In 2008, RIDOT will initiate feasibility studies of additional stations in East Greenwich and Cranston and of bringing service to existing Amtrak stations in South Kingstown and Westerly.

Intermodal Planning also is an active participant in other rail studies in the state, including the Transit 2020 Metropolitain Providence study, Woonsocket-Warwick passenger rail, and the Pawtucket Train Station study.



The above map shows the locations of commuter rail stations in Rhode Island. Providence Station is in operation and stations in Warwick and North Kingstown are set to open in the next three years. The other stations are being considered as future stops.

## Bicycle & Pedestrian Program

RIDOT's steady progress in bike path development reached a major milestone in 2007 as the opening of new path segments in the summer and fall helped Rhode Island surpass the 50-mile mark of open bike paths.

As the chart below shows, Rhode Island now has 51.2 miles of bike paths open. In 2008, RIDOT expects construction to be underway on an additional five to six miles of path. Additionally, RIDOT is studying and designing various other bike path segments with the goal of someday having a network of paths exceeding 100 miles. The Department's Intermodal Planning and Highway Engineering sections take the lead on bike path development.

RIDOT has made numerous strides in bike path development in Rhode Island, with many projects in the design and construction phase. Constant updates are maintained on RIDOT's BikeRI website at www.dot.ri.gov/bikeri.

Some of Rhode Island's longer bike paths – the Blackstone River Bikeway, the Washington Secondary and East Bay Bike Path – are part of an ambitious effort from the Rhode Islandbased East Coast Greenway Alliance to create a contiguous



Above, autumn leaves carpet the newest section of the Blackstone River Bikeway in Lincoln.

bike path from Maine to Florida. Among the 13 states the East Coast Greenway would pass through, Rhode Island is a leader in getting its segments of bikeway built.

Bike path development has been taking place in all parts of Rhode Island and in all types of areas including rural, suburban and urban settings. About 20 years ago, RIDOT took an active role in bike path development with design and construction of the East Bay Bike Path, the State's first multicommunity bike path. The 14-mile long path from Providence to Bristol proved to be immensely popular, and it prompted great interest and support among the general public to see more bike paths built.

Now Rhode Island has six major bike paths. RIDOT in 2007 marked the completion of three projects. In late August, RIDOT reopened a segment of the Blackstone River Bikeway that had been closed for three years. The challenging project to rebuild a vehicular bridge and create a grade-separated crossing for the bike path was delayed due to periods of heavy rain and river flooding. The reopening resulted in a major safety improvement.

Distance of Rhode Island's major bike paths	
Bike path name & location	Total mileage
Blackstone River Bikeway: Valley Falls Heritage Park on Broad Street in Cumberland to Woonsocket Water Treatment Plant, Manville Hill Road, in Woonsocket.	10.3
East Bay Bike Path: Veterans Memorial Parkway in East Providence to Independence Park in Bristol.	14.0
William C. O'Neill (South County) Bike Path: Kingston Station (Amtrak), Route 138 in South Kingstown, to Route 108 in South Kingstown, close to the Narragansett line.	5.6
<b>Ten Mile River Greenway:</b> Ferris Avenue in East Providence to Slater Park at Armistice Boulevard in Pawtucket.	2.0
Northwest Bike Trail/Fred Lippitt Woonasquatucket River Greenway: Providence Place Mall (Promenade Street) to Lyman Avenue in Johnston.	5.1
Cranston Bike Path*: Cranston Parkade, Garfield Street to West Natick Road (off Route 2 near Warwick Mall).	5.5
Warwick Bike Path*: West Natick Road to Providence Street.	1.6
West Warwick Greenway*: Providence Street to vicinity of Coventry border (Whitford Street).	2.8
Coventry Greenway*: Whitford Street to area of Town Farm Road.**	4.3
* These are considered part of the Washington Secondary Bike Path. ** Portions unpaved.	
Total:	51.2

In September, RIDOT dedicated a 3.6-mile extension of the Northwest Bike Trail. This trail included the first signifi-

cant stretch of off-road bikeway in Providence, passing through a densely populated urban area. The entire 5.1-mile bikeway uses off-road and on-road segments to connect downtown Providence at the Providence Place Mall to Johnston.

In November, RIDOT dedicated a 2-mile extension of the Blackstone River Bikeway. The new path began at the northern end of the path in the Manville section of Lincoln and extended into

Woonsocket. The addition increased the bikeway's length to 9 miles.

The Blackstone River Bikeway will see new extensions in 2008. RIDOT in the coming year expects to open a 1-mile section from the southern end of the path to Cumberland Town Hall, crossing a marsh on a unique elevated boardwalk. Additionally, RIDOT hopes to see completion of 1.4 miles of path being built by the Department and the City of Woonsocket at the current northern end of the path. Combined, the new segments will amount to a 11.4-mile bikeway. When completed, the Blackstone River Bikeway will be about 19 miles long.

In 2008 RIDOT also hopes to begin work on a long-anticipated project to connect two segments of paved bike path in Coventry. As part of the Washington Secondary Bike Path, the Coventry Greenway is mostly paved but 1.6 miles has only a gravel base. When paved, the path, which connects to the larger Washington Secondary Bike Path, will be 14.2 miles long, surpassing the East Bay Bike Path as the state's longest bike path.

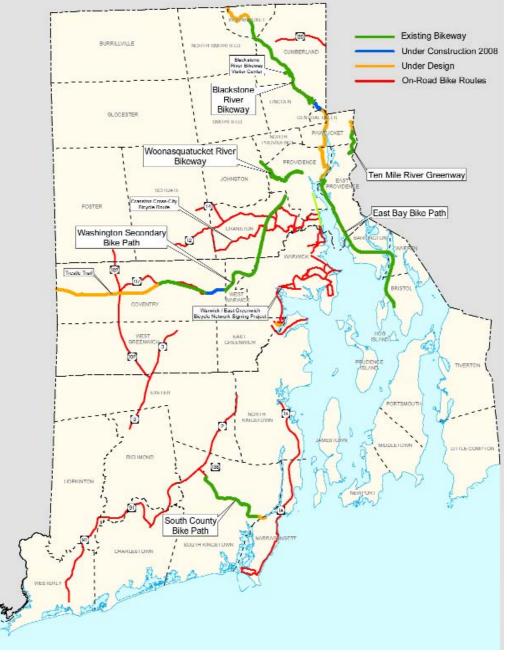
RIDOT is eyeing two other bike path extensions that may begin construction in the next year or two. These include a 1mile extension to the South County Bike Path, from the current end of the path on Route 108 in Wakefield to Mumford Road in Narragansett. RIDOT also is working to add just under 1 mile of trail to the northern end of the Ten Mile River Greenway

WOON

in Pawtucket, beginning at Armistice Boulevard and connecting to an athletic field complex at Daggett Park.

In addition to bike paths, the Intermodal Planning section also oversees the bike lane and bike route signage plans. There are four miles of dedicated bike lanes in Providence and Cranston and more than 90 miles of signed bike routes throughout the state. Intermodal Planning also administers the

Recreational Trails Program and Safe Routes to School Program.



The map above shows the location of the state's major bike paths. Inset at top, one of the many new granite markers installed recently along the Blackstone River Bikeway.

### **Administrative Services**

The Administrative Services Division at RIDOT serves as a support system for most activities undertaken by the Department, from contract administration to providing education and training to support of transportation-related construction industries.

Administrative Services' primary responsibilities involve the development and implementation of a comprehensive administrative support services program; ensuring the effective and efficient achievement of departmental policies, goals and objectives; ensuring that resources are utilized in conformance with State and Federal laws, rules and regulations; and overseeing major departments under it, including Contract Administration, the Office of Business and Community

Resources and the Office on Highway Safety.

Administrative Services has the responsibility for all RIDOT administrative, programming, coordination and liaison duties for external advancement and educational programs including the University of Rhode Island Transportation Center (URITC). In keeping with those responsibilities, Administrative Services has participated in the award of more than \$1 billion in contracts since 2001.

Among its major ventures, Administrative Services is the liaison between RIDOT and the University in regard to the URITC and the URI Center for

Transportation Studies. RIDOT was instrumental in assisting to secure a \$12 million grant from the U.S. Department of Transportation, which requires a one-to-one match to assist URI in developing, implementing and administering the program. The Administrative Services Division Assistant Director is responsible for all program coordination with the Transportation Center.

The Transportation Center was established in 1999 to conduct multidisciplinary education, research, technology transfer and outreach for surface transportation systems and advanced transportation infrastructure. The mission and goals of the center is to advance U.S. technology and expertise in the many disciplines comprising transportation through the mechanisms of education, research and technology transfer. The Center, in partnership with RIDOT, has implemented an aggressive program with the University's Guaranteed Admission Program (GAP). This program is groundbreaking

in the development of a school curriculum that recognizes math and engineering in every area of study. Teachers and advisors have worked with the Center and RIDOT to educate the students on the many opportunities of transportation related careers. The Rhode Island Consulting Engineers (RICE) has agreed recently to be an additional resource for schools within the GAP and to work with that program, the URITC, and RIDOT in the establishment of Transportation Related Clubs.

RIDOT has also secured the commitment of RICE who has provided, through their membership, assistance to classroom teachers and internship opportunities within their firms. Students have been exposed to the college campus and

classroom, and also been afforded internship opportunities.

This past school year in partnership with RICE, URI's College of Engineering and Civil Engineering Department, and URITC, RIDOT conducted its first Robotics Challenge for middle school students and the first Engineering Career Day. The latter event consisted of five handson learning lab areas of: Bridge and Geotechnical Engineering, Highway and Traffic Engineering, Surveys and Geographic Information Systems (GIS), Water Storm Management, Hazardous Materials, Environmental Planning and Transportation. Intermodal

Above, a high school student explores bridge designs at one of five learning labs during the first Engineering Career Day at the University of Rhode Island.

More than 100 students participated. For more information, visit www.uritc.uri.edu.

One of the most visible components of this partnership with URI is the annual Construction Career Day, now in its seventh year. On May 16 and 17, 2007, RIDOT, the Federal Highway Administration (FHWA), the Transportation Center and members of the private construction industry, partnered to host the event at the Mid-State Facility in Coventry. The event addresses two different areas of concern, the large number of at-risk high school students who have no college plans or career plans as they finish their high school education, and the growing deficit of well-trained employees entering the construction field. Construction Career Day offers these students the opportunity to explore the many different career opportunities within transportation construction.

About 1,600 students attended the event and were able to speak to members of the construction industry. They also

had hands-on exposure to construction equipment. For more information, visit www.uritc.uri.edu/ccd.

The success of Construction Career Day in Rhode Island served as the impetus for the Administrative Services to lead a charge for the establishment of a National Construction Career Day Center (NCCDC). The NCCDC has been established under the auspices of Administrative Services at the URITC and is beginning its third year of operation. For more information, visit www.uritc.org/nccdc, where you can also find a link to a video presentation on Construction Career Day. This year, the NCCDC has received endorsements from both the American Association of State Highway and Transportation Officials and the Associated General Contractors of America.

The momentum created by the success of the Construction and Engineering Career Day events has led the Department to explore the offering of Summer Academies in construction, engineering, and business. The planning for these programs is also well under way and the first Academies will be offered in the summer of 2008.

Other programs URI and RIDOT are working on collaboratively include a partnership between the Transportation Center and the University of Puerto Rico at Mayaguez to begin offering students exchange experiences. Students are given the opportunity to work at the Center and at RIDOT within its summer intern program. This year marked the third year of the program and the first visit of URI students to the campus at Mayaguez. In the coming year, Administrative Services intends to expand the program to include an exchange of faculty and DOT engineers and RIDOT is cur-



Above, high school students visit a wood working station during Construction Career Days at RIDOT's Midstate Facility in East Greenwich.



A cameraman from Channel 10 observes middle school students at a robotics competition at URI.

rently exploring the possibility of expanding the partnering of this program to include the International Engineering Program with Spain.

Another outreach program is called the Local Technology Assistance Program (LTAP). RIDOT continues to support this important program which is aimed at Rhode Island public works employees and other transportation practitioners. LTAP training provides useful assistance in workforce development, best practices, and safety. The LTAP is located at the Transportation Center where services are managed and planned. In the past year, a dozen individuals have been trained and certified as flaggers through the LTAP program. Training is provided throughout the year for cities and towns as well. In 2008 LTAP will expand to an International Twinning Partnership with Central European Countries for an exchange of ideas and technology. This program approach is sponsored by the FHWA National Office of International Programs. Rhode Island is one of only a handful of states actively participating in this effort. In addition, as part of the LTAP Program, the Division has brokered a partnership with other cities and towns to offer apprenticeships.

The Administrative Services Division will continue oversight of the RIDOT/URI collaborative agreements. These agreements, beginning in December 2000, have established three transportation engineering faculty positions at the URI College of Engineering. Additionally, a senior transportation management faculty position, along with a faculty position in transportation and urban planning, has been established at the URI College of Business. The most recent hire has brought much needed expertise in the area of Environmental Engineering. This will further enhance a closer professional relationship with URI and assist in the professional linkage by expansion of the academic curriculum in concentrated areas of applied transportation research and the joint involvement in the RIDOT Transportation and Civil Engineering Program.

#### **Contract Administration**

In fiscal year 2007, Contract

Administration participated in

the award of 27 construction

projects worth \$30.2 million.

This section is responsible for all contract procurement at RIDOT, Computerized Highway Affirmative Action Management Program (CHAMP) and Quest/Electronic Bidding.

Within Contract Administration, the Office of Contracts and Specifications serves to establish formal business arrangements between RIDOT and suppliers of all major goods and services the Department purchases from the private sector. Procurement responsibilities fall into two contract categories: Construction projects that are selected through electronically-based bidding procedures, and professional services contracts that are both engineering-oriented (such as Bridge, Highway and Traffic design related) and non-engineering related (such as media campaigns, computer services

and highway safety initiatives). With construction projects, the apparent low-bidder then undergoes a postqualification process subject to both departmental review and Federal acceptance, if required. Professional services contracts are subject to qualification-based selec-

tion procedures in accordance with State and Federal laws and regulations. Final selection recommendations are then presented for both departmental acceptance and State and Federal approvals before costs are negotiated and finalized for contract award.

The Office of Contracts and Specifications oversees each step of the process, including coordination of on-line public notification of all transportation-related projects through the use of the Rhode Island Vendor Information Program (RIVIP). The division is in direct participation in the competitive selection process, establishment and execution of contractual documents, daily interaction with contractors, consultants and the general public as well as project coordination with the Department of Administration's Office of Purchases, the Federal Highway Administration (FHWA) and other Federal or State agencies.

Occasionally, RIDOT needs to acquire specialized goods and services. These services can range from hiring professional management consultants to hiring specialized contractors to provide a broad range of services.

In Fiscal Year 2007, Contract Administration participated in the award of 27 construction projects worth \$30.2 million, including a number of GARVEE projects. During 2007, Contract Administration moved ahead with the implementation of new web based software, Quest Web, for the development of engineer's estimates and to serve as the foundation for electronic bidding. Contract Administration successfully converted the advertising process for construction bids into an all electronic format, making project documents available on disk at no charge to the public.

Contract Administration has been actively working with a team of RIDOT professionals in the review of State and Federal procurement practices and to recommend improvements as they relate to architectural and engineering services. New draft procedures have been drafted and are currently undergoing review.

Contract Administration also continued research efforts within RIDOT, FHWA, other states' DOTs and other states' online procurement systems to direct RIDOT toward the most efficient, effective participation in the web-based RIVIP.

Among other activities in Fiscal Year 2007, Contract Administration led the review and negotiations with the

> Rhode Island Consulting Engineers (RICE) group on the standard contract used on all design projects; continued expansion and advancement of web-supported procurement; execution of Master Price Agreement procurements utilized for both bridge and steel inspection

purposes; the continued expanded use of electronic data transfer to maximize paper reduction; and the integration of the new Construction Management System (CMS) into the existing Project Management Portal (PMP) and Financial Management System.

In addition, Contract Administration has prepared and submitted two applications to the to FHWA for its SEP-15 Program, a new process by which innovative contracting techniques can be used and evaluated.

In the 2008 Fiscal Year, Contract Administration's goals include: Continued research, planning and implementation of electronic data transfer, disk and web-based processes to most efficiently meet RIDOT procurement needs; planning and implementation of the new web-based software for electronic bidding (Quest Web); and development and implementation of a web-based software to streamline and integrate many reporting and compliance obligations.

In regard to CHAMP, the Office of Business and Community Resources and the Office of Contracts and Specifications are preparing a request for proposal for new web-based software to streamline the process of contract compliance and reporting by the contractors, their Equal Employment Opportunity, Affirmative Action, On the Job Training, and disadvantaged business enterprise utilization. This new software will also include Labor Management reporting and compliance for the Department of Labor regulation and Davis Bacon prevailing wages reporting and compliance.

# Business & Community Resources

RIDOT plans to emerge

Rhode Island-based DBE

firms into areas of work not

currently performed by DBEs.

The Office of Business and Community Resources (OBCR) is all about making connections for businesses by providing them training while at the same time supporting the overall construction industry.

This section is responsible for the Disadvantaged Business Enterprise (DBE) Program, Emerging Business Program and the On the Job Training Program. Many accomplishments were realized in 2007.

Business and Community Resources again successfully partnered with the Federal Highway Administration (FHWA) and the University of Rhode Island's Transportation Center

to conduct the Transportation Summer Institute. The Institute takes place during July and August each year and includes two, oneweek sessions for middle school students. It offers them exposure to transportation careers, often reaching students who are unfamil-

iar with engineering and transportation issues.

Also working cooperatively with the Transportation Center, RIDOT operates the RIDOT Transportation and Civil Engineering Program. This is a national transportation and civil engineering outreach program that was developed to stimulate the interests of middle and high school students, particularly minorities and women. The program has the participation of RIDOT transportation professionals, as well as the Rhode Island Consulting Engineers (RICE) and the Rhode Island Society of Professional Engineers (RISPE).

In Summer 2006, RIDOT entered into an agreement with the Talent Development Program at URI to assist with recruitment and delivery of the outreach program – as well as maintaining a presence in urban middle and high schools.

Business and Community Resources does a great deal of outreach to those already in the job force, while also paying attention to minority-owned and small businesses. The Office monitors contractor compliance with disadvantaged business enterprise [DBE] and On the Job Training regulations and goals. Currently approximately 31 individuals are participating in the On the Job program.

Within the next three years, RIDOT plans to emerge Rhode Island-based DBE firms into areas of work not currently performed by DBEs, based on the under-utilization of the protected classes defined in Federal DBE regulations (49 CFR Part 26).

Business and Community Resources has expanded its approach to developing opportunities for underutilized

DBEs to participate on RIDOT projects. This includes new areas of expertise within the DBE community such as graffiti removal/abatement, hazardous waste, utility, specialized landscape items and catch basins.

DBE regulations recommend that DOT's utilize minority/women owned banks to assist in the development of DBE firms. While there are no minority/women owned banks in Rhode Island, RIDOT has an agreement with the Minority Investment Development Corporation (MIDC) to administer the Emerging Business Program. This financing program has completed lines of credit for underutilized DBE contractors,

provided financial counseling, contract financing, and financed equipment purchases.

A comprehensive commercial loan vehicle placed within the underutilized DBE community through the MIDC accomplishes this. To date RIDOT has expend-

ed \$1.5 million and looks to expanding that to \$2 million this fiscal year.

The OBCR in the past year received funding from the Federal Highway Administration (FHWA) to partner with industry organizations, prime contractors, universities and community colleges, Community Based Organizations (CBO), DBEs, and other partners to implement a two-year pilot called Business Opportunity and Workforce Development (BOWD) in Rhode Island. The BOWD Program provides business and workforce development services through partnerships from a variety of sources. The BOWD operates from within the existing RIDOT OBCR. RIDOT has combined its remaining DBE and on-the-job training supportive services programs under the BOWD Program to create a restructured program embracing elements of traditional supportive services with the visionary concept of FHWA's BOWD Centers.

The BOWD program offers parallel DBE business development programs and on the job training programs that partner with talented grassroots community based organizations in Rhode Island. These partnership programs target the workforce needs of underutilized DBE firms. The BOWD program enables DBEs in Rhode Island to enhance the development of their workforce as well as the prime contractors' workforces. On the Job Training/DBE supportive services are being provided to help to expand the growth of these DBE firms and to assist them with the development and retention of their workforce.

## Office on Highway Safety

The Office on Highway Safety (OHS) oversees a variety of programs geared toward enhancing the safety of all users of Rhode Island's roadways. Major efforts underway include programs to increase seat belt usage, reduce speeding and further public education on the dangers of drinking and driving.

Important accomplishments in the past year include a reduction of fatalities on our roadways from 81 in 2006 to 69 in 2007. In addition, through aggressive media and enforcement programs, Rhode Island's seat belt usage rate increased from 74 percent to 79.1 percent. However, despite these achievements, Rhode Island continues to lag behind the national average of 81 percent.

The Office on Highway Safety (OHS) will continue to advocate for changes in State legislation to create a primary seat belt law. Currently, Rhode Island has a secondary law which only allows police officers to cite offenders if they have been pulled over for other reasons. The exception to this is a primary law that requires seat belts or appropriate child restraints for all children under the age of 18. A comprehensive primary law would allow a vehicle to be stopped if any of the occupants were not wearing seat belts. The National Highway Traffic Safety Administration (NHTSA) estimates that passage of a primary seat belt law in Rhode Island would save approximately five more lives, 118 serious injuries, and \$25.8 million in costs per year. In addition, the Office on Highway Safety will continue to implement aggressive media and enforcement campaigns, under the banner of "Click It or Ticket" (CIOT) to continue to promote increased seat belt usage throughout the state.



Former RIDOT Director Jerome F. Williams speaks at a kickoff event at the Veterans Memorial Auditorium with the State Police for increased drunk-driving enforcement just prior to Labor Day.



A police officer installs a child safety seat as a newspaper photographer looks on during National Child Passenger Safety Week in February 2007 at a Babies "R" Us store in Warwick.

For the second year, OHS joined with the Interscholastic League, AAA, the Rhode Island State Police (RISP) and WBRU radio station to sponsor the "Buckle Up Teens" contest. High school students from around the state were again challenged to develop a 30-second radio and/or television commercial promoting safety belt use among teens. The winning entries were premiered on the video screens at McCoy Stadium (home of the Pawtucket Red Sox baseball team) at the kickoff event for the 2007 CIOT National Campaign. Officers from numerous local police departments and the RISP were present at the event. The first 3,000 fans to enter McCoy Stadium that night received a Paw Sox CIOT rally towel. OHS will be sponsoring this event again in 2008. However, teen entries this year can address any of RIDOT's major safety messages and will not be restricted to seat belts.

OHS also supports programs addressed to the proper use of child restraint systems. It is estimated that as many as 90 percent of child restraint systems are installed incorrectly. To address this issue, OHS participated in the installation of child safety seats as part of National Child Passenger Safety (CPS) Week in February. Nationally certified CPS technicians checked 47 seats. The Providence Bruins mascot "Samboni" made an appearance at the event, which was covered live during news broadcasts on two local stations.

Over the past year, OHS has broadened its education and outreach messages, particularly for alcohol and seat belt programs, into the minority communities.

Activities included interviews with the OHS program coordinator and the Law Enforcement Liaison and production of a holiday season television commercial in Spanish with 13



Above, winners of the 2007 Buckle Up Teens contest during a pre-game ceremony before a Pawtucket Red Sox game at McCoy Stadium in Pawtucket in May. RIDOT and others sponsored the contest in which teens created radio and television advertisements to promote seat belt usage. Below, numerous police officers attended the event as well.

Hispanic officers emphasizing the "You Drink and Drive. You Lose" message. In April, OHS also revised a NHTSA script to produce a "Fans Don't Let Fans Drive Drunk" TV commercial, in Spanish, for the Impaired Driving campaign during the World Gold Cup Soccer Championship. In addi-

tion, staff presented programs at many festivals throughout the summer, including the Summer Latin Music Fest in July. Activities included use of the Fatal Vision goggles that simulate various levels of alcohol impairment. Participants were administered standard field sobriety tests with the goggles to demonstrate the effects of alcohol on their motor skills. OHS will further expand these outreach activities over the next year.

Unfortunately, motorcycle fatalities in the U.S. have risen over the past seven years. Despite these trends, Rhode Island achieved a reduction from 16 to 14 motorcycle fatalities last year. RIDOT has begun outreach to the motorcycling community and will con-

tinue to expand those efforts over the next year. In March, OHS produced a public service announcement (PSA) for Motorcycle Safety and Awareness Month in May. The PSA focused on re-educating the motoring public on who the average biker is. Today's bikers include men and women from every profession, ethnic group and educational level. The stereotypical biker no longer exists. The central message to the general motoring public was "Be Aware, Drive and Ride

with Care."

Alcohol-related crashes and fatalities levels continue to remain high in Rhode Island. There is also an over representation of young drivers (age 16-20) involved in these crashes. In addition to aggressive media and enforcement campaigns

to support the "You Drink and Drive. You Lose." campaigns, OHS worked with the Bristol/Warren Substance Abuse Task Force on an underage drinking forum featuring the R.I. Attorney General's Office, Bristol Police and MADD RI. It was hosted by Steve Aveson, the Channel 12 news anchor.

The need for the collection, analysis and sharing of highway safety data continues to grow each year. This past year, the Traffic Records Coordinating Committee began coordinating the installation of laptop computers and printers in law enforcement vehicles around the state to implement the electronic crash reporting system, the electronic citation program (E-Citation) and initiated the groundwork to begin collecting the eth-

nicity data for drivers and passengers, as required for continued funding for the racial profiling program. In 2007, installation of the computers in Rhode Island State Police vehicles was completed and a program is in place to continue completing all the cities/towns within the state.

In addition to these highlighted programs, OHS has aggressive programs to address other priorities for pedestrian, bicycle and speed related injuries and fatalities.



## **Construction Management**

The Construction Management section oversees all active projects from the bidding process through final completion. Most contracts are for the construction and rehabilitation of highways and bridges. The projects are quite diverse ranging from the simple, such as pavement crack sealing, to the complex, such as the relocation of a major Interstate with the Iway project.

Construction Management operates with a team of individuals assigned to each project; the number based on the complexity of the contract. RIDOT typically assigns a resident engineer to each contract, along with a group of inspectors. This team oversees the entire life of the construction contract from day one to final inspection. The constant contact keeps

RIDOT on top of projects, enables it to immediately address and resolve unexpected problems, and to ensure compliance with all design and materials specifications.

Large-scale projects are keeping Construction Management busy, chiefly the Iway project. In 2007, RIDOT realized many achievements with the Iway project (see pages 8-

11), including the opening of the first major piece of the new roadway that connects I-95 North to I-195 East. The opening represented the end of a successful year in which Construction Management orchestrated a series of overnight highway closures and the transition to the new ramp. With the exception of minor delays at the beginning of each night closure and delays experienced in the first couple of days of the Iway being open, motorists have not been greatly impacted by the changes. Traffic flows through the center of Providence better than it ever has with the new ramp open.

In 2008, Construction Management will again be very busy with Iway-related work. This includes the planned closing of on-ramps and off-ramps adjacent to the current interchange of I-95 and I-195. Additionally, RIDOT intends to close the old ramp from I-95 North to I-195 East, which has remained open to provide access to two downtown exits before construction reached the stage that the ramp had to be closed. As 2008 draws to a close, RIDOT intends to open another major piece of the Iway, the ramp from I-95 South to I-195 East.

Numerous other smaller-scale projects are under Construction Management's wing, and in 2007 numerous projects were completed. This included numerous safety improvements along the Route 1/Route 4 corridor in South

County, including the construction of turnaround ramps and cable-wire guardrail to prevent crossover accidents. RIDOT also completed numerous bridge rehabilitation projects, including a \$12 million project that rehabilitated bridges that carry I-295 over Route 6 in Johnston.

Work continues in 2008 on other projects including the rebuilding of

the Warren Bridge, the intersection reconstruction project at the corner of Routes 5 and 113 in the Greenwood section of Warwick, and the Route 403 Relocation Project in East Greenwich and North Kingstown (see pages 16-17). Construction Management also will be overseeing a number of bridge projects, including the start of the Sakonnet River Bridge Replacement Project (see pages 14-15), the School Street and Main Road bridges in North Smithfield, the Hawkins Street Bridge over Route 146 and the Route 146 bridge over Branch Avenue (both in Providence).



Above, a view of the Iway with active construction on a new ramp from I-95 South to I-195 East, which RIDOT expects to open in 2008. The far right side of the bridge carries traffic on the new ramp from I-95 North to I-195 East, which RIDOT opened in November 2007. At top, a view of the Providence skyline from the Iway with deck pans gleaming in the sunlight.

#### **Customer Service Office**

As part of the Department's renewed commitment to the general public and communities within Rhode Island, former RIDOT Director Jerome F. Williams created the Customer Service Office during the first quarter of 2007.

The Customer Service Office responds to inquiries from the general public regarding transportation issues during the planning, design and construction phases of a project. Customer Service also coordinates efforts with cities and towns, businesses, chambers of commerce, public and private

organizations, elected officials, State postings or sequencing of construc- Service has worked on tion issues such as major lane or exit ramp restrictions.

Customer Service addresses public issues arising from physical alteration or utility permit issues, maintenance concerns and hazards, traffic data, construction issues, traffic engineering issues and project advertising dates. The office plays an active informational role in an effort to lessen inconveniences and economic impacts to the communities.

To facilitate this process RIDOT has created a Customer Service Office segment on the Department's website (www.dot.state.ri.us/custserv), which offers links to frequently sought information. RIDOT also established a dedicated phone line to the Customer Service Office (401-222-2450), which is answered in person during business hours.

As part of its effort to answer citizen questions, Customer Service coordinates meetings with the Engineering and Maintenance divisions to effectively reach a solution and respond to inquiries.

The Office assists in coordinating an effective public information program. This is accomplished by working with the Design and Construction sections, incorporating such tools as project brochures and informational handouts.

The Office coordinates public meetings for the Engineering and Construction sections, as required. This includes development and distribution of public notices and project mailings as necessary and to work cooperatively with the Chief Engineer; the Road, Bridge, Traffic and

Engineering design sections; the Legislative Liaison; and the Office of Communications to sequence said notifications.

Monthly reports are prepared for Departmental sections and the Director's office identifying all outstanding and completed issues. Other functions include

preparation of letters and responses for the Director, Chief Engineer and Deputy Directors as necessary.

The Customer Service Office maintains a log of inquiries, responses and project related issues. As of March 2008, Customer Service has worked on approximately 2,000 concerns or project-related matters.

In 2007, the Customer Service Office actively participated in a number of projects, including power point presentations, as required. Among them:

#### ments. Such efforts may involve bridge As of March 2008, Customer approximately 2,000 concerns sures and restrictions, Providence; or project-related matters

- I-95 (Pawtucket River Bridge);
- Apponaug Circulator, Warwick;
- East Main Road, Portsmouth;
- Iway (I-195 Relocation) night clo-
- Waterman Avenue Bridge, East Providence:
- Pell Bridge Ramps, Newport;
- Route 6/Rte. 10 Connector, Providence;
- Waterfront Drive, East Providence;
- · Conant Street Bridge, Pawtucket; and
- Barrington/Warren Bridge projects.

The Office also facilitated 22 pre-construction conferences. Several are listed below:

- Improvements to Warwick Avenue, Warwick;
- Waterman Bridge Shoring, East Providence;
- Sakonnet River Bridge site demolition, Tiverton;
- Wanskuck Hawkins Street Bridge, Providence;
- Dillon Corner Bridge Repairs, Narragansett;
- Route 146 Guardrail, North Smithfield;
- Station Park Interim Landscaping, Providence;
- I-95 Bridge 550, Pawtucket;
- Main Street & Great Road Bridges, Lincoln; and
- Peace Dale Stone Arch Bridge, South Kingstown.

Based on the recognition and effectiveness of the Office of Custom Service and an increased construction program, RIDOT anticipates that the office's responsibilities will increase during 2008.

Most frequent inquiries fiantied by Customer Service			
Department	Number of Inquiries		
Highway & Bridge Maintenance	598		
Customer Service (direct responses)	507		
Traffic Engineering	294		
Construction	198		

Road Design

Most frequent inquiries handled by Customer Service

## Bridge Design

In 2007 the nation's attention was focused on the condition of bridges with the tragic collapse of the I-35W Bridge in Minneapolis, Minnesota. RIDOT fielded numerous questions in the days and weeks that followed, educating the public about the condition of Rhode Island bridges and all the work RIDOT does to inspect and maintain these structures.

Nationally, Rhode Island ranks high in percentage of its bridges that are labeled as structurally deficient. Much of this is due to the age of the bridge infrastructure, particularly Interstate bridges that were all built in roughly the same time period in the 1950s and are reaching the end of their service lives. Rhode Island's proximity to the Atlantic Ocean also creates varying weather conditions in the winter with repeated freeze-thaw cycles, which further deteriorates bridges.

Rhode Island also has a high number of older bridges that were not built to current design specifications. They are tagged with the functionally obsolete label despite being safe.

The Bridge Design unit vigorously oversees the inspection of 772 bridges (State and locally owned) in all of Rhode Island's 39 cities and towns. RIDOT contracts with five private firms to conduct the inspections, with every bridge subject to inspection at least once every two years. As of late 2007, RIDOT was current with all of its bridge inspections.

If a recent bridge inspection yields a problem, Bridge Design reacts immediately to post a weight limit on the bridge or to close it. This happened the same day as the Minneapolis collapse when RIDOT received inspection information that morning for the Peace Dale Stone Arch Bridge in South Kingstown. Within a few hours the bridge was closed and a detour established.

The bridge was repaired in six weeks and reopened to traffic. RIDOT also painted the underside of an aluminum liner used to support the bridge from below so it would not reflect in the water and detract from the historic bridge. The gap between the liner and the original stone arch was filled with high strength grout to allow a direct contact and let the liner carry more of the bridge's weight.

Another deficient bridge RIDOT is aggressively working on is the Pawtucket River Bridge, which carries I-95 North and South over the Pawtucket River in the northern part of the state. RIDOT has been closely monitoring this 51-year-old bridge, and the results of an inspection in 2007 led the Department to institute a 22-ton weight limit on the bridge.

Due to the importance of this bridge and the high volume of traffic that it carries, RIDOT will be fast-tracking the replacement of this bridge. Exact costs and timetables have not been finalized yet, but RIDOT hopes to complete the new bridge in a three-year period. To do this, RIDOT is exploring innovative construction methods and the use of precast elements as much as possible. One idea is to build portions of the new bridge adjacent to the existing one and slide them into place when completed.

The condition of all RIDOT bridges is available online at www.dot.state.ri.us/engineering/br/index.html.

Many other bridge projects will be coming on line in 2008. These include the new Sakonnet River Bridge (see pages 14-



Above, a view of the new Providence River Bridge last fall just prior to the opening of the Iway to traffic.

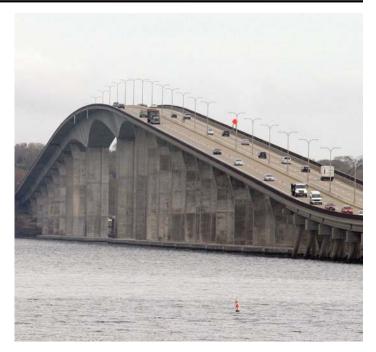
16), and two bridges that carry I-95 over Weaver Hill Road in West Greenwich. Bridge Design also is eyeing a major project that entails the replacement of the superstructure for the Stillwater Viaduct Bridge, which carries Route 116 over the Woonasquatucket River in Smithfield. This project, likely starting in early 2009, will include a complete rehabilitation of the historic arch.

Work that began in 2007 will continue for the replacement of the superstructure for bridges that carry Main Street and Great Road over Route 146 in North Smithfield. The project is expected to cost \$7.3 million and take three years to complete. Other work that started in 2007 and will continue in 2008 includes the Hawkins Street Bridge over Route 146 and the Route 146 Bridge over Branch Avenue (both in Providence).

Major projects in 2008 include a \$3 million contract to maintain the Jamestown-Verrazzano Bridge, a large bay crossing bridge connecting North Kingstown and Jamestown. Additionally, Bridge Design will be overseeing repairs to the Ten Mile River bridges that carry North Broadway in East Providence and the Shippee Bridge in Burrillville. RIDOT recently placed stricter weight limitations on both bridges due to advanced deterioration.

As for normal day-to-day business, Bridge Engineering reviews and oversees the work of engineering consultants as a project's construction plans and specifications advance from the conceptual design/study stage through final design. The Bridge staff coordinates the entire design process with engineering consultants, other RIDOT sections, the Federal Highway Administration, utility companies, historic agencies, cities and towns, environmental organizations and





RIDOT is planning to begin a \$3 million rehabilitation project to the Jamestown-Verrazzano Bridge in 2008.

numerous other parties. Once a project is in construction, Bridge staff continues to coordinate and resolve field issues that may arise, process shop drawings, and conduct reconnaissance efforts with resident engineers throughout the construction phase.

Bridge Design also has charge over the reviewing requests for overweight and oversize permits accepted by the Department of Motor Vehicles. It receives, on average, two to three requests daily.



The images above show the detail work involved in the repair of the Peace Dale Stone Arch Bridge in South Kingstown in September 2007. At left, the underside of an aluminum liner used to support the bridge is coated with black paint so it does not cast a reflection in the stream below and detract from the historic appearance of the bridge. At right, a closer look at the top of the liner.

## **Road Design**

The Road Design unit of the Design Section has oversight for many of RIDOT projects, both large and small, and works to supervise those through all the various stages of design.

Many projects under Road Design's auspices are designed by outside consultants, who essentially serve as an extension of the in-house engineering staff. Road Design remains involved right up to the time for advertising for a construc-

tion contract, including writing bid specifications and reviewing bids.

The larger projects Road Design is working on include the major and minor reconstruction of roads and intersections, safety improvements and a variety of other projects, including RIDOT's bikeway development program.

One of the larger projects is the Apponaug Circulator project, a \$22 million effort to improve traffic circulation through the heart of Warwick, Rhode Island's second-most popu-

lated city. The main goal of the project is to divert traffic around the center of Apponaug, alleviating congestion and improve east-west traffic across the city.

With the new bypass road planned, RIDOT also is planning to return two-way traffic to certain main roads in the village. As part of this, RIDOT is proposing to redesign five intersections with traffic controlled by roundabouts. These traffic features should allow for safe passage of the high volume of traffic without the delays caused by conventional four-way intersections controlled by traffic signals.

In 2007 RIDOT began structural demolition in the area of the new intersections and bypass road. This should continue in 2008 with the initiation of another demolition contract to begin razing the old Apponaug mill site. One section of the mill, designated the "Saw Tooth" building due to its unique roofline, will remain for redevelopment.

Another major safety initiative for Road Design is the installation of cable-wire guardrail along numerous limited

access highways and higher-speed arterial roadways. RIDOT begin installing this type of guardrail in South County, first in South Kingstown and then in North Kingstown. With only a narrow grassy median separating northbound and southbound traffic, the guardrails were needed to prevent dangerous crossover accidents. Additionally, the installation of the guardrail took place at the same time RIDOT was removing a number of designated median crossovers and installing

jughandles wherever possible to allow traffic to reverse direction.

The cable-wire guardrail has numerous advantages over fixed guardrail. Its ability to flex when struck allows the guardrail to capture an errant vehicle as opposed to providing a hard surface a vehicle might hit and ricochet off and back into traffic. The cable-wire guardrail also is much easier to maintain and repairs can be made quickly – an added benefit for worker safety.

In 2008 RIDOT plans to complete three median guardrail



This map shows the five new roundabouts planned for Apponaug Village in Warwick as part of a major project to ease congestion and improve traffic flow across the city. Inset above, a rendering showing how the Newport rotary could be reconfigured into a modern roundabout.

projects on 11.5 miles of roadway. These include cable guardrail on stretches of limited access highway in the northern part of the state on I-295 and Route 146 and steel guardrail along the East Shore Expressway in East Providence, also known as the Wampanoag Trail (Route 114). At this time, RIDOT is planning to issue contracts for seven other roadway segments (see chart on this page). These projects have yet to be scheduled, but RIDOT hopes to complete those areas in the next two to four years.

Road Design continues to work on plans for creating better access to the downtown area of Newport, one of the Rhode Island's most popular tourist destinations. The City of Newport asked RIDOT to consider redesigning the ramps system for the Pell (Newport) Bridge, which carries Route 138 onto Aquidneck Island from the west. The goal of the project is to reduce stacking from vehicles taking the exit for downtown Newport. The backup extends into the low-speed lane on the bridge during peak travel times.

In 2008 Road Design expects to bring a number of drainage improvement projects to bear. These include repair to drainage systems in the area of Hope Street and Silver Creek in Bristol. This area experiences chronic flooding at times of heavy rain and high tides. The drainage work should significantly lessen the impact of stormwater runoff and the area should remain flood-free in all but the highest moon tides.

Road Design also oversees major resurfacing projects in which the driving surface is beyond repair. These 1-R



A section of U.S. Route 1 in South Kingstown with recently installed cable guardrail.

(Resurfacing) Projects are less intense than a full roadway reconstruction, and generally include cold planing and new surface overlay. Additionally, correction of minor drainage problems, installation of new signage and striping and sidewalk restoration (including making the sidewalks compliant with the Americans with Disabilities Act).

Some upcoming 1-R Projects in 2008 include Airport Road in Warwick (\$4 million), Atwells Avenue in Providence (\$1.1 million), Elmwood Avenue in Providence (\$5.5 million), West Main Road in Middletown (\$4.4 million), and Danielson Pike in Scituate (\$2.5 million).

RIDOT Median Guardrail Initiative						
Roadway	Limits	City/Town	Miles	Cost	Schedule	
Route 1	Route 138 to Steadman Government Center	South Kingstown	3	\$800,000	Completed	
Routes 4/1	Lafayette Road to Route 138	North Kingstown	3.8	\$1 million	Completed	
Route 146	Route 146 to Massachusetts state line	North Smithfield	5.5	\$1.5 million	2008	
Route 114	East Shore Expressway to Massasoit Avenue	East Providence	3	\$1 million	2008	
I-295	Route 122 to Massachusetts state line	Cumberland	3	\$800,000	2008	
Route 1	Succotash Road to Route 138	South Kingstown	4	\$1.1 million	*	
Route 24	Route 114 to Boyds Lane	Portsmouth	1.9	\$500,000	*	
Route 10	Reservoir Road to Route 6	Cranston	2.3	\$650,000	*	
Route 6	I-295 to Route 6	Johnston	0.9	\$250,000	*	
Route 4	Stony Lane to I-95	East Greenwich	5	\$1.3 million	*	
Route 24	Fish Road to Massachusetts state line	Tiverton	1.4	\$400,000	*	
Route I-95	1-mile area south of Exit 5 in Exeter	Exeter	1	\$300,000	*	
		Totals	34.8	\$9.6 million	* To be scheduled	

## **Traffic Design**

The Traffic Design unit has the task of doing all it can to keep traffic moving at intersections while making sure it happens as efficiently and safely as possible.

Many projects fall under Traffic Design, from installing new signals to reviewing existing intersections for changes and safety improvements. Traffic Design also is responsible for the design and implementation of all traffic control devices on all State-maintained roadways (including pavement markings, signs and signals, and overhead direction signs on freeways).

A major role for Traffic Design is its connection with the State Traffic Commission. The Department responds to complaints from citizens about intersections or other traffic control features and works with the State Traffic Commission to implement changes. Traffic Design also provides support services for the Commission, such as performing studies, writing letters, making recommendations, and other tasks.

Traffic Design continues to take a lead on the incorporation of round-abouts into numerous intersection improvement plans. This is one of the biggest design changes to come along in some time for RIDOT.

A roundabout is much smaller than a rotary, and cars enter at more of a right angle to the circle as opposed to a wider angle. The result is slower speeds and the ability to provide crosswalks on approach roads. Traffic in a roundabout only moves at about 20 to 25 mph on average. The Insurance Institute for Highway Safety has found that using a roundabout instead of a traffic signal reduces accidents by 75 percent. The design eliminates dangerous sideimpact crashes and reduces rear-end crashes.

In the past two years, RIDOT has installed three roundabouts, the first in 2005 at the intersection of Smith Street and Woonasquatucket Avenue in North Providence. In 2006, RIDOT completed installation of a roundabout at the entrance to Twin River, a gaming facility on Route 246 in Lincoln. In 2007, RIDOT finished work on a roundabout on Providence Street in West Warwick, where a con-

fluence of six streets was organized into a single intersection.

Another dozen or so roundabouts are being considered in urban, suburban and rural settings in Cranston, Exeter, Lincoln, Newport, North Providence, Portsmouth, Smithfield, South Kingstown, Tiverton, and Warwick. Traffic Design also is studying a proposal to include roundabouts in the area of Roger Williams University in Bristol as the artistic renderings below illustrate.

In 2008 RIDOT intends to begin a reconstruction project at the intersection at Howard Avenue and New London Avenue in Cranston. This area has seen dramatic increases in traffic volumes, and many State offices in the Howard Complex are accessed through this intersection. Two round-abouts are part of this design, one on the state highway and another in adjacent Howard Complex. RIDOT expects to seek bids on this project in late 2008.



These renderings show the potential use of roundabouts on Route 114 in Bristol, near Roger Williams University. The above image shows the northern roundabout at the entrance to the university. The bottom image shows the southern roundabout.



Roundabouts vs. Rotaries			
	Modern Roundabouts	Traditional Rotaries	
Size	150 to 230 feet - generally two lanes	600 feet or more	
Average Speed	15 to 25 mph	30 to 35 mph	
Angle at Entry	Sharper curve - forces traffic to slow	Smooth curve or no deflection	
Traffic Control	Yield control	Stop control	
Right of Way	Vehicles in the roundabout	Vehicles entering the circle	

Also in 2008 Traffic Design expects to begin a safety improvement project on Wampanoag Trail, also known as Route 114. Much of the roadway operates as a limited access highway but there are signalized intersections, center median turnarounds and other unsignalized cross streets. RIDOT will begin addressing safety concerns by improving signage, improving overhead lighting, installing guardrail and widening vegetated clear zones. Traffic Design will continue studying the area, analyzing the impact of the improvements and consider any other necessary safety improvements.

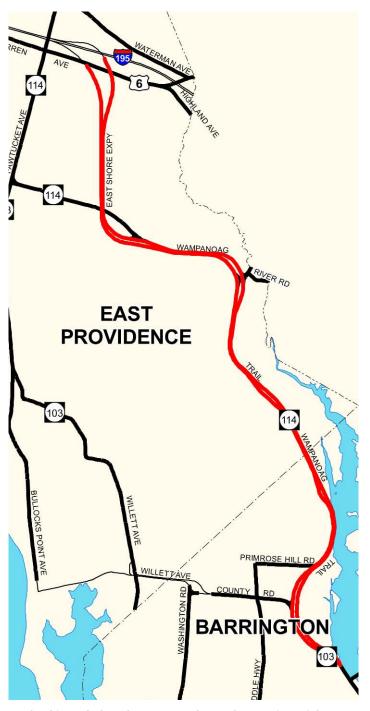
Traffic Design also is charged with reviewing what are classified as high hazard intersections, based on accident data RIDOT obtains from all Rhode Island law enforcement agencies. The data drives Traffic Design's planning for potential improvements.

Other major tasks for Traffic Design include signal optimization (with interconnection where possible), signing and striping of roads.

Traffic Design also has review authority over the use of automated cameras for red light enforcement activity. Currently, the City of Providence has about 50 intersections equipped with the technology and RIDOT is reviewing applications for others.



A view of the recently completed roundabout on Providence Street in West Warwick.



Marked in red, the above map shows the section of the East Shore Expressway and Wampanoag Trail (Route 114) in East Providence and Barrington along which RIDOT expects to begin a significant safety improvement in 2008.

#### DoIT/GIS

The Management Information System Section is composed of three units, Network and Technical Support, Programming Services and Geographical Information Systems (GIS). The General Assembly mandated information technology consolidation in 2004 and as of September 2007 two units were transferred to the Division of Information Technology (DoIT) under the Department of Administration (DOA). The GIS unit was originally to be transferred as well; however Federal funding reimbursement regulations make it more advantageous to have GIS within RIDOT for programming and electronic mapping.

Currently there are 13 DoIT/DOT staff and eight DOT/GIS staff assigned to support the Department of Transportation. They are responsible for computer related services which include network communication, custom programming, software installation, computer related purchases (hardware, software and accessories), hardware

inventory/maintenance, on-line help desk, training, troubleshooting, GIS data integration/mapping and the management of consultants developing custom applications.

All three units are now using an electronic help desk/work order system to better manage and track issues. This system is connected to the DoIT unit and allows for better service and communication. The last phase to be implemented involves the migration of help desk response from a one person a day responder to a team approach at DoIT whereby the caller would no longer leave a message but instead speak directly to a technician. This should provide for immediate response. If the problem was not resolved over the phone, the information would be gathered and a service ticket would be entered.

Technical Support is overseeing a project nearing completion that will bring every PC up to the minimum requirements for running Windows XP and Office 2003 Products. There are still approximately 50 workstations that need to be replaced to meet the standard software requirements.

Technical Support is currently involved in a large project to move to a Virtual Server Environment. This provides the ability to take full advantage of our current resources to provide more and better services to our users. This effort has reduced the current physical server environment by 40 percent. Technical Support expects to finish this project in late Spring 2008.

RIDOT's network has been upgraded in key spots. This gives the Department the security of being on newer and more reliable equipment. This included an upgrade in the Transportation Management Center with which MIS assists and ensures standards are met by consultants.

The Programming Services staff is responsible for maintaining the Oracle Financial Suite also referred to as FMS. This system went live two years ago but consultants were still onboard assisting in the transition and programming needs. Beginning in FY2007, DOT staff has supported and has met all new reporting requests made from the Executive staff, Financial Management, Human Resources, Payroll and the auditors for many modules within the FMS. Staff also supported the interfaces of FMS accounts payable data to the Rhode Island Financial Accounting Network System, an integrated system used by DOA for processing of requisitions, purchase orders, and invoices.

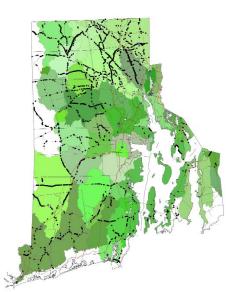
This unit also supports many ad hoc systems for the Department sections. The programs are either in Microsoft Access or Visual Basic.

RIDOT's Project Management Portal (PMP) is in the test phase of migrating to the State Network. There is staff from both the programming services and GIS units learning and supporting this application which sits on five servers.

The Department's GIS unit is comprised of Programmers, GIS Analyst, Database Manager, and a Project Manager. They continue to work toward integration of GIS technologies within the Department. During 2007, the GIS unit implemented a new ArcGIS server as part of the PMP. This server allows, for the first time, editing GIS data through a web browser. It will also provide a foun-

dation for all future GIS web applications.

The GIS unit also has supported the roll out of tablet computers with GPS to aid in the collection of information in the field. So far the units have been used in the collection of data for reduced mowing, drainage inventory, storm water sampling, and outdoor advertising. There are plans to continue to this data collection approach with other sections in 2008. Also in 2008 there will be new Pictometry digital imagery available as part of a coordinated project between RIDOT, E-911 and the R.I. Emergency Management Agency. This project will make available high resolution ortho and oblique (aerial) imagery for the entire state by mid 2008.



This image created by RIGIS shows watersheds in Rhode Island and drainage outfalls along major roads.

## **Environmental**

The Environmental Section touches nearly all RIDOT projects in that it reviews projects for compliance with applicable environmental regulations and secures necessary environmental permits. Included in the section are the Natural Resources Unit and the Cultural Resources Unit.

Natural Resources interfaces with a number of State and Federal agencies to facilitate permitting by reviewing plans and specifications for RIDOT construction projects. Chief among them are the Rhode Island Department of Environmental Management (RIDEM), the (Rhode Island) Coastal Resources Management Council, the Environmental Protection Agency, the U.S. Coast Guard and the Army Corps of Engineers. It may also work with other

agencies or municipalities as needed.

In addition to its review role, Natural Resources for incorporating project elements that will makes recommendations reduce an impact on a natural resource. for incorporating project -

elements that will reduce an impact on a natural resource. This could involve redesign of a slope near a wetland feature or a suggestion to construct a fish ladder during bridge rehabilitation of bridges over streams with significant anadromous fish runs.

Natural Resources has direct involvement with all projects with the issuance of a Categorical Exclusion (CE), one of the levels of environmental review of construction projects as required by the National Environmental Policy Act. The section also is involved in more complex reviews called Environmental Assessments and Environmental Impact Statements, however a majority of RIDOT projects involve the issuance of CEs. Projects generally qualify for a CE, and not a more intensive environmental review, if they involve maintenance, rehabilitation, minimal public impact, little or no right-of-way acquisition, and no significant social, economic or environmental impacts.

Natural Resources is the lead section for hazardous materials review. This mostly involves soil investigation of project to determine if any remediation is needed. Typically RIDOT works with a project consultant on any hazardous material issues, and typically any remediation involves removal or capping of contaminated soils. In some cases, Natural Resources may recommend a more significant remediation, as was the case with a groundwater remediation on the future site of the Warwick Intermodal Station.

Another prime role for Natural Resources is the handling of storm water runoff. RIDOT is required to implement and use best management practices to address minimum control measures that will help in reducing the impact of storm water runoff. Among the achievements are education and training

about the impacts of storm water discharges, inspection and mapping of drainage outfalls, oversight of construction site runoff, regular maintenance of catch basins and drainage structures and annual street sweeping.

In 2008, Environmental expects to begin working with RIDEM, the Coastal Resources Management Council, the University of Rhode Island and the National Resources Conservation Service on updating the Erosion and Sediment Control Manual. This publication sets all the standards for best management practices regarding construction and environmental impacts.

An equally busy division is the Cultural Resources Unit, which also must closely coordinate with other agencies,

including historical organi-Natural Resources makes recommendations zations and Federally-recognized tribes, in regard to projects RIDOT potential impacts with historic and/or cultural re-

sources. Cultural Resources undertakes studies that identify these resources and any potential impacts to these resources by transportation projects. Historic and cultural resources are identified as significant buildings, structures (such as bridges), landscapes, monuments, districts, archaeological sites and his-

toric cemeteries.

During 2007, the Cultural Resources Unit staff reviewed a number of projects that involved efforts to identify potentially-significant archaeological sites such as: the Warwick-East Greenwich Bicycle Network, the Coventry Greenway, the Post Road/Route 1 Intersections Improvement Project in Charlestown and Westerly, and the Capron Bridge Replacement Project in Smithfield. Among the several archaeological sites discovered were a 2,000-year-old Native American campsite, a late 18th century farmstead, a mid 19th century textile worker's home, and a late 19th century grist mill.

One of the more unusual projects requiring staff involvement consisted of ongoing planning to rebury the remains of approximately 70 people who were discovered during a drainage repair project in 2006 adjacent to Route 37 in Cranston. The remains date from 1887 to 1918. When Route 37 was constructed in the 1960s, a portion of the highway was built over an unmarked State cemetery.

Cultural Resources used archaeological techniques to remove the remains and in 2007 had its consultant do extensive genealogical research on the individuals. In 2008, Cultural Resources anticipates reburying the remains in another State cemetery in Cranston and is coordinating with the Public Affairs section to organize a fitting memorial service.

## Highway & Bridge Maintenance

In 2007, Maintenance and its partners at

the Department of Corrections collected

more than 69,000 bags of litter.

The success of the Highway and Bridge Maintenance Division, with its highly visible duties of highway snow removal, grass cutting, sweeping, litter removal, traffic signals, and overhead lighting systems, is directly linked to the overall success of the Department.

Available 24 hours a day, seven days a week, Maintenance is on the front lines at all times. During the past two years, there

has been a reorganization of activities and personnel, and a consolidation of efforts and facilities, to help the Division better serve the public.

for routes.

To aid in snow removal efforts, and to better manage winter storm operations, the RIDOT's Management Information Systems section worked to create a state-of-the-art system for Maintenance that will be utilized for all State snow routes. These snow routes are now on web-based GIS maps, with driver and vendor information

To assist in road cleaning activities, and to expand on the level of attention paid to that task, Maintenance increased the use of Department of Corrections litter crews. In 2007, Maintenance and its partners at the Department of Corrections collected more than 69,000 bags of litter and swept all of the State-maintained roads at least once. This amounted to 1,100 miles, or about 3,000 lane miles.

The Department also is looking to expand the volunteer Adopt-a-Highway program, which provides sponsorship of two miles of highway for group litter removal, and the Sponsor-a-Highway Program, a privatized program where sponsors pay a fee to have a section of highway cleaned, and get recognized with a highway sign. Additionally, a major emphasis has been placed on the volunteer Adopt-a-Spot program to help the State in its litter control efforts.

Maintenance Division personnel also are placing a strong emphasis on re-energizing overhead highway lighting. This includes repair of non-functional highway lighting and devel-

oping a long term plan to reconstruct and upgrade existing lighting systems on all State highways. In total, the division maintains approximately 6,900 overhead lamps.

head lamps.

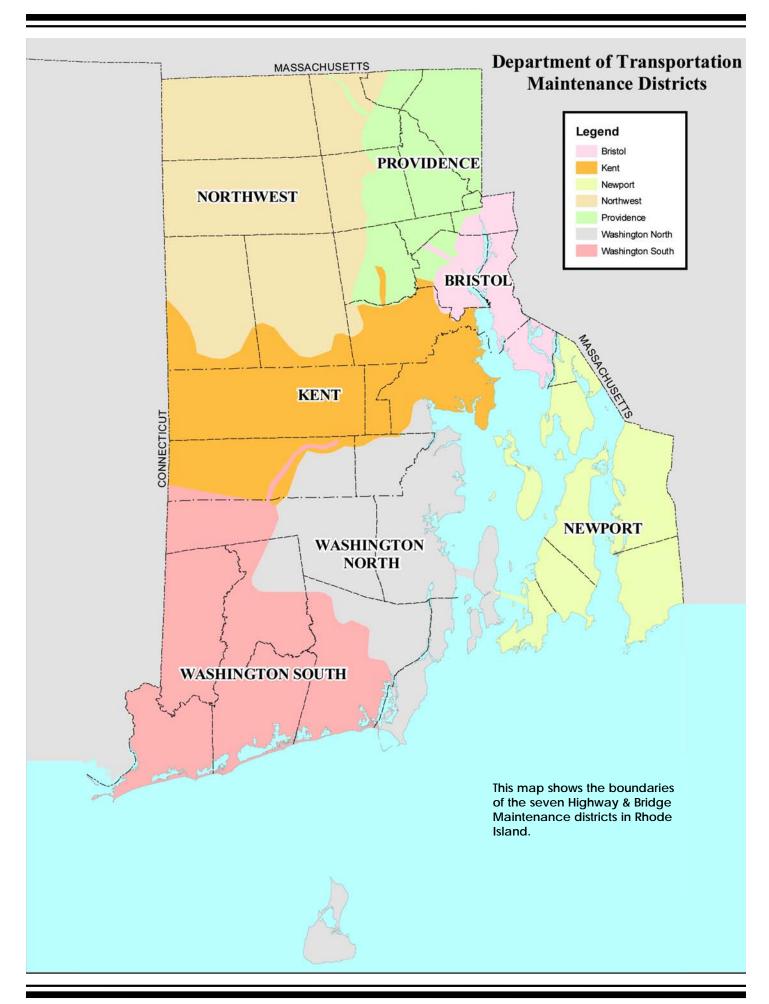
Concurrently, infrastructure maintained by this division is being improved through other capital improvement projects. All future construction projects will address overhead lighting, signaling, signing and striping, as appropriate.

This Division also handles minor drainage problems such as cleaning drainage structures and pipes, installation of berms along roadways and repairing existing paved drainage waterways such as swales. With limited staff, the Maintenance Division also handles repair (typically paving) of short segments of old highway until a resurfacing or road rehabilitation project is scheduled and a permanent repair is performed.

Bridge Maintenance staff work cooperatively with the Bridge Design unit to continually prioritize repairs on all of the state's 772 bridge structures. Bridge Maintenance works day and night on scheduled and unscheduled repair jobs on bridges throughout Rhode Island.



A line of State snowplow trucks parked behind the Highway and Bridge Maintenance headquarters building in Warwick.



## **Intermodal Planning**

Intermodal Planning remains quite busy, taking the lead on a major expansion of passenger rail service in Rhode Island with new stations planned in the next three years in Warwick and Wickford. Beyond those high-profile efforts, Intermodal Planning has its hand in a host of other projects, all having to do with alternative transportation projects or those making improvements that serve to beautify the roadways.

These efforts fall into two major project categories, those called Enhancement Projects and those done under the Congestion Mitigation and Air Quality (CMAQ) Program. Enhancements Projects are required under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and RIDOT each year must commit 10 percent of its annual surface transportation

program funds to projects that address the environmental impacts of transportation and highway construction. The CMAQ Program, also administered through SAFETEA-LU, provides funds to support projects aimed at improving air quality.

The 12 categories of Enhancement Projects include: bicycle and pedestrian facilities; safety and educational activities for pedestrians and bicyclists; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs, including 
The Dutch Island Lighthouse off Jamestown tourist and welcome center activities; was restored in 2007 with funds from RIDOT. landscape and scenic beautification;

historic preservation; rehabilitation and operation of historic transportation buildings, structures, or facilities; preservation of abandoned railway corridors; control and removal of outdoor advertising; archaeological planning and research; environmental mitigation to address water pollution due to highway runoff or to reduce vehicle wildlife mortality while maintaining habitat connectivity; and establishing surface transportation museums.

Among the major projects in 2007 was the completion of the Pawtuxet Village Streetscape Project. This signature streetscape was the product of close coordination between RIDOT and its municipal partners in the cities of Warwick and Cranston. The project included crosswalk improvements, bump outs, travel lane narrowing, landscaping and period lighting along Broad Street and Post Road in this historic village that is home to the Gaspee Day celebration.

Another major project that came to a successful conclusion in 2007 was the rehabilitation of the Dutch Island Lighthouse in Narragansett Bay. Working with the Dutch Island Lighthouse Society as the lead, this early 19th century treasure was restored for future generations to come. The Society has established a fund to maintain the improvements to this light on this small uninhabited island off the coast of Jamestown.

Also in 2007, two significant streetscape projects were completed. New sidewalks, landscaping and lighting were installed on Market Street in downtown Warren, connecting Main Street to the East Bay Bike Path. In addition, similar improvements were completed on Warren Avenue in East Providence. Both communities were the lead in designing and building their respective projects, and both are great examples of municipal partners in the Enhancement Program.

In 2008, an equally diverse set of enhancement projects are

planned. Among them are the relocation of the historic signal tower at Kingston Station, where the structure will be dismantled, moved and reassembled next to the historic train station. Another large scale project involves the completion of the King Street Improvement Project in East Greenwich. Construction began in 2007 on new sidewalks, street trees, and resurfacing along King Street, which connects the historic Hill section to the historic Harbor section of East Greenwich.

Other planned enhancement projects in 2008 include starting the Phase Π improvements to historic

Washington Square in Newport, streetscape improvements and traffic signal improvements to Westminster Street in Olneyville, streetscape and intersection improvements to Manton Avenue and Atwells Avenue in Providence, Rose Island Light renovations in Newport, streetscape improvements in the village of North Scituate, and cultural landscape and design at historic Smith's Castle in Wickford.

Intermodal Planning will continue to fund RIPTA's Providence to Newport Ferry service from May-October 2008. Other water based transportation projects for 2008 include the start of the Newport Harbor Shuttle improvements at Ann Street Pier and Perotti Park, and further safety improvements to the State Pier in Galilee with DEM for the Block Island Ferry.

In 2008, Intermodal Planning will continue to administer smaller locally-led transportation projects, such as the Old Stone Bridge Beautification Project in Tiverton, the Portsmouth Town Center Project, and the Warren Bike Path.



## Landscape Architecture

The Landscape Architecture Unit is an integral part of all RIDOT projects given the Department's commitment to make landscaping a component of nearly every project it does.

Landscape Architecture is responsible for the integration of all landscape architectural elements in project development in order to achieve a cohesive and sustainable project. These elements include, but are not limited to, hardscape and softscape items such as:

- Recommendations for pavement type, color and textures;
- Recommendations for benches, bollards and lighting fixtures; and
  - Selection of site specific plant materials.

This Unit is involved in all phases of a project's development, from the initial steps such as the public participation phase and conceptual design, to final design and advertising. Landscape Architecture also remains involved through the construction phase. Similar to the Design Section, the majority of this work is done by landscape architecture consultants, who serve as an extension of the in-house landscape architectural staff.

The most recent and easily recognizable project this Unit managed is the I-95 Gateway Project in Cranston. This project was constructed in order to improve the visual character of this section of the Interstate which runs from the area of T.F. Green State Airport in Warwick into Providence. The project consisted of removing existing crushed stone slopes and replacing them with serpentine retaining walls and ornamental plantings. These improvements will provide a more pleasurable driving experience for motorists and visitors passing through this portion of the I-95 corridor. This project was constructed in three contracts and the final phase will be completed at the end of 2008. The total cost for all three contracts was approximately \$5 million.

Another large landscape project this Unit is managing is the landscape design for the Route 403 Relocation Project (see pages 16-17 for more information). This landscape design project will be built in four phases. One has been completed, another is currently in construction, one is scheduled to be advertised in 2008, and the final one will be advertised for construction in 2009. The total cost of landscaping on this project is estimated at \$4 million. The overall design intent is to re-vegetate this new roadway corridor and to help integrate it into the surrounding environment and community context.

Presently under design is another large landscape project for the Iway project (see pages 8-11 for more information). There are seven separate landscape projects under various stages of final design. The designs will consist of the re-vegetation of India Point Park, the addition of landscape enhancements to the India Point Park Pedestrian Bridge (see

page 13 for more information), the Interstate, and some of Providence's local streets. The first project is scheduled to go out to bid in late fall 2008 with subsequent contracts scheduled to be advertised through 2014.

Besides the highway, bridge and traffic projects, the Landscape Architecture Unit also works on other projects such as bicycle paths, storm water demonstration projects and enhancement projects. They also are involved in research projects with the University of Rhode Island as it relates to roadside vegetation issues.

In 1985 the RI Scenic Roadway Program was established, by legislation, in order to designate and protect roadways which have special scenic qualities. A Scenic Roadways Board was established in order to administer this program and this unit serves as staff support to this board.



Above, pine trees were planted along a new ramp from Route 1 to Route 138 in North Kingstown. Below, autumn sedum lines a section of Route 1 in Charlestown.



## **Public Affairs**

The Public Affairs division, also called the Office of Communications, had an intensely busy year in 2007 with more than 1,000 requests for information and interviews from print, broadcast and online media.

Much of the activity was generated by key events throughout the year including construction and the opening of the Iway. Public Affairs also organized various events ranging from from the Iway public walk on October 20 to smaller events such as bike path dedications. Public Affairs took the lead on the Iway public walk and coordinated with other RIDOT departments and outside agencies to organize the event. The public walk proved to be immensely popular and attracted an estimated 10,000 visitors in just three hours.

Another major focus of attention was the condition of bridges in Rhode Island and RIDOT's procedures for inspecting them. Media interest was particularly high after the I-35W bridge collapse in Minneapolis, Minnesota in August. In addition to disseminating information about the current state of bridges in Rhode Island, Public Affairs was intricately involved in raising public awareness about a significant weight limitation being placed on the Pawtucket River Bridge, which carries I-95 traffic in the northern part of the State. The Division's efforts included designing a full-page advertisement in a local newspaper outlining detour routes and offering an assortment of detour maps available on RIDOT's website (www.dot.ri.gov).

With the Pawtucket River Bridge detours and other periodic closures and detours occurring during the year, RIDOT began employing different web-based mapping programs. These included creating "virtual flyovers" of a detour route using the popular Google Earth program. Motorists used the maps to see the new detour they would be using before they drove it. Additionally, Public Affairs made use of customized embedded maps on RIDOT's website, whereas only textual





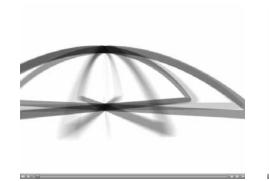
Above, Tom
Langford of ABC 6
interviews Deputy
Chief Engineer Frank
Corrao on the Iway
during a tour of
recently installed
steel components. At
left, a photographer
peers out of an
access hole in one
of the Iway's massive
beams.

descriptions of detour routes were available before.

Public Affairs' biggest leap in technology though was in the creation of video podcasts about the Iway. These were prepared in time for the opening of the first segment of the Iway to traffic. The podcasts are like mini documentaries that tell the story of how the Iway came to be and its safety and design features. The podcasts graphically show, with the use of computer-generated graphics, the new ramp and highway systems and the differences from existing conditions.



Members of the Public Affairs staff and others join former RIDOT Director Jerome F. Williams (fifth from the left) on the day of the Iway public walk on October 20, 2007.



## PODCAST #1 IWAY PROJECT OVERVIEW





Shown above is a sequence of images from RIDOT's video podcasts on the Iway project. At left, the opening sequencing features a spinning set of arches. Center, the title screen. At right, a computer-generated image of the new ramp to I-195 East from I-95 South.

RIDOT chose this medium to help reach a larger audience, particularly younger drivers. Public Affairs views the podcasts as a new form of media, and another means to disseminate information along with traditional outlets of newspaper, radio and television. RIDOT also produced Spanish language versions of all six of the podcasts.

One of Public Affairs' proudest accomplishments came in August 2007 when RIDOT learned it had won five national communications awards. The American Association of State Highway Transportation Officials gave out these prestigious awards at their National Transportation Public Affairs Workshop (NTPAW) in Tacoma, Washington.

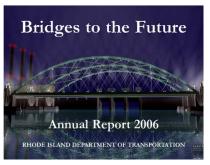
Public Affairs Chief Dana Alexander Nolfe won the prestigious Public Relations Professional of the Year Award. She earned this for her work the previous summer for the celebration of the 50th Anniversary of the Interstate System, as well as work associated with the demolition of the old Jamestown Bridge and the floating of the Iway bridge up Narragansett Bay.

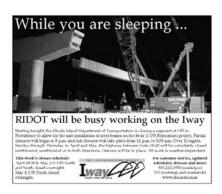
Nolfe also organized a cross-country caravan from California to Washington D.C. while conducting numerous press events along the way. She wrote a blog about her journey that was posted on the website of NBC 10, the leading television station in the Providence market. The online journal entries, which later were published on RIDOT's website, also received a Features Story award from NTPAW.

Additional awards included:

- Print or Electronic Media Kit for the kickoff of the Iway bridge float in August 2006.
- Newspaper or Magazine Print Ad for a newspaper ad related to overnight highway closures for the Iway project. The ad's message, "While you are sleeping," focused on commuters each morning who would find a new beam in place from the previous night's work.
- Annual Report for RIDOT's 2006 Annual Report. This 50-page document featured numerous photos, illustrations and graphs to fully explain the wide range of projects and activities RIDOT was responsible for.







At top, Public Affairs Chief Dana Alexander Nolfe receives the award for Public Relations Professional of the Year at the National Transportation Public Affairs Workshop. Middle and bottom, respectively, the cover of the 2006 RIDOT Annual Report and an advertisement for Iway construction, which also won awards.

### Real Estate

The Real Estate section has many responsibilities that all have an element of land ownership and the use of land on and near State-owned transportation infrastructure.

These tasks fall under two main areas: Property Management and Acquisition. Property Management tends to be busier than Acquisition; however, land acquisition is a vital component for RIDOT. Real Estate often clears the way for projects to move forward with a key acquisition that in its absence, would be sig-

nificantly detrimental to a project's

Property acquired in the past year 14 land sale agreements for a involve some of RIDOT's highest-total of \$8.7 million. profile projects including residential \_

and commercial properties at the Sakonnet River Bridge project in Tiverton and Portsmouth. The Design Section in 2007 developed a modified alignment that reduced the amount of right-of-way necessary for the bridge replacement. RIDOT to date has acquired three residential parcels and two commercial buildings. Real Estate continues to pursue agreements with property owners on both sides of the river for small partial acquisitions, utility easements and temporary construction easements.

For the commuter rail stations in Warwick and Wickford, the right-of-way staff has acquired the remaining land and easements necessary for the Warwick Intermodal Station and continues to work on agreements needed to allow the Wickford Junction station to be completed.

A significant land sale was completed in March 2007 with the City of Newport in which RIDOT sold a 5.34-acre parcel in the city's north end. The property was part of a former right-ofway for a cross-island highway which was never built.

The sale price was \$1.5 million; however, that money will be used toward the State's match of \$6 million in Federal funds. The transaction also was unique because it represents a large parcel for redevelopment in Newport's densely populated North End.

Real Estate is continuing to do an inventory of all Stateowned property to determine future sales of land deemed surplus to transportation needs.

Other projects Real Estate is involved with include the Army Aviation Facilities Expansion-Quonset State Airport, the Apponaug Circulator project and continuing construction along Route 5 in Warwick, Hartford Avenue in Johnston, and the Warren Bridge. Among the newest projects are wetlands mitigation along the Freight Rail line in Warwick, improvements to West Main Road in Middletown, Bridge 550 in Pawtucket, and the Wyoming Bridges in Hopkinton.

In the area of property management, Real Estate in 2007 finalized the update of RIDOT's Outdoor Advertising Rules and Regulations. Following a public hearing process, they were promulgated by the Secretary of State. The regulations, which govern the control, erection, and maintenance of outdoor advertising signs and billboards, are now considered to be among the strictest in the nation, and can serve as a model for the rest of the country. In addition, the regulations now reflect and address the control of new technologies in the outdoor advertising field, such as LED-based billboards. As part of the

updating of the regulations, the billsuccess or require major redesign Real Estate in 2007 completed board permit fee was increased to now accurately reflect the cost of running the Outdoor Advertising Program. Fees increased from \$50,000 per year \_ to \$228,000 per year.

> Real Estate also made approximately 100 presentations before the State Properties Committee and RIDOT Land Sales Committee in 2007. Real Estate has made more than 50 field inspections of encroachments, constituent complaints, and Adopt-A-Spots, attended approximately 150 meetings with various agencies and answered or initiated an estimated 7,500 telephone and e-mail communications regarding the disposal, rent or use of RIDOT-controlled property.

> One of the lesser-known tasks Real Estate has been involved with is the execution of letters of authorization for various movie and television projects. Rhode Island has become a popular setting for the entertainment industry, and as such producers have sought various locations on or near transportation infrastructure for shoots. These included the Showtime cable television series The Brotherhood, and feature films including Dan In Real Life; Hachiko, A Dog's Story; Tanner Hall; Evenings; 27 Dresses; and Shutter Island. In 2008, Property Management anticipates continued work on agreements associated with Hachiko, A Dog's Story and another season of The Brotherhood.

> A major project undertaken in 2007 was the beginning of the preparation of the RIDOT Americans with Disabilities Act Transition Plan. The plan, mandated by the Federal Highway Administration, must reflect the results of a comprehensive review and survey of the buildings, facilities, programs, and practices under the jurisdiction of RIDOT. The review will identify architectural barriers to persons with disabilities who are interested in accessing RIDOT's programs and services. To date, 59 RIDOT sites/facilities have been identified and categorized.

> In addition, the plan will prioritize the removal of these barriers including those whose removal is essential to providing access to specific elements under the jurisdiction of RIDOT (curb ramps, parking stalls, etc.) to access programs not otherwise accessible by modification of programs and practices. Other barriers would be removed as planned alterations are made to a specific building or facility.

## Research and Technology

The Research and Technology Development Section, with a staff of eight persons, has primary Departmental responsibility for transportation research; product evaluation and technology transfer; engineering review of highway and bridge design projects; geotechnical review and consultation on subsurface foundation design and environmental contamination issues; and, since 1997, administration of the RIDOT Pavement Preservation Program. The section also, at the request of the Chief Engineer, undertakes certain additional projects that require specialized experience or expertise.

With input from the RIDOT Research Advisory Committee (RRAC), the section assesses and coordinates recommendations for the selection of research topics for the annual research program and, at the conclusion of each research project, makes recommendations for the implementation of the research findings.

Some research areas currently being pursued are intelligent

transportation (message signs), new modified asphalt, high performance concrete, metals, highway vegetation, environmental, over-size and over-weight truck permitting systems, and systems related to asset management and geotechnical data.

The Section also is actively involved in regional and national research, collaborating with the New England Transportation Consortium, and the American Association of State Highway and Transportation Officials (AASH-

TO). National involvement includes membership on the AASHTO Research Advisory Committee and on the AASH-TO Standing Committee on Research. Through these memberships, the Department participates in determining the direction of regional and national research.

The Product Evaluation Unit of Research and Technology evaluates all new products, technologies, processes, and equipment for use on RIDOT construction projects and maintains a listing of approved products and vendors. The Unit evaluates contractor requests to use proprietary products on RIDOT projects. In collaboration with the Northeast Protective Coatings Committee, it is responsible for evaluating paints and other coatings. Research and Technology also participates in the National Transportation Product Evaluation Program. Additionally, the Unit serves as part of the technology information center of the Department, planning and organizing various workshops and seminars.

The Engineering Review Unit provides technical support to

the Design, Construction, and Maintenance Sections. Research and Technology engineers review the plans of all highway and bridge design projects and recommend new technologies, materials, and processes; draft and review job-specific and standard specifications; and provide unique Departmental expertise in Portland cement concrete, asphalt pavement, and coating technologies.

The Geotechnical Review Unit performs the Department's primary geotechnical, geohydrologic, and subsurface environmental review of proposed projects. This includes assessment of structure foundation design as well as the review and assessment of soil and groundwater contamination issues. Section staff members have been instrumental in introducing geosynthetics, reinforced earth, and mechanically stabilized earth retaining wall technology to the Department.

The RIDOT Pavement Preservation Program is administered by Research and Technology. Pavement preservation is

> the practice of extending a road's service life by using protective surface treatments in a timely manner, making the surface less permeable, thus preventing water penetration that will destroy the road foundation and could lead to destruction of the road. RIDOT's entire pavement preservation program has been recognized by the Federal Highway Administration as one of the best in the country, and an example other states' DOTs

should follow.

In 1997, an annual crack sealing program was initiated. Rubberized chip seal, Novachip, and thin elastomeric overlay have since been introduced. In 2007, RIDOT committeed \$1.7 million with 106 lanes miles crack sealed and 25 lane miles restored with rubberized chip seal. No elastomeric was placed in 2007. In 2008, RIDOT intends to spend \$4.5 million on pavement preservation, with 258 lane miles of crack sealing, 39 lane miles of rubberized chip seal and 10 lane miles of thin elastomeric overlay planned for the coming year.

To improve the efficiency of the Pavement Preservation Program, the section is working with the Management Information Systems section to consolidate the data bases of the various sections and to enhance the geographic information system currently in use.

Also in 2008, Research and Technology will continue working with RIDOT's Bridge section and the University of Rhode Island to develop a web based system for approving permits for oversize and overweight trucks.



A truck lays down liquid asphalt during a placement of rubberized asphalt chip seal.

# Transportation Management Center

The Rhode Island Transportation Management Center (TMC) is recognized as a leader throughout the Northeast region because of the complete complement of Intelligent Transportation Systems (ITS) architecture and programs implemented on a statewide basis. These include approximately 90 closed-circuit cameras, numerous fixed and portable message boards, and a Highway Advisory Radio sys-

tem. All these, along with a traffic sensing technology, are tied into the TMC's website for viewing by anyone interested in checking on road and traffic conditions. RIDOT also makes this information available via 511.

The TMC's broad-based information gathering and sharing capability enables the TMC to identify highway incidents and congestion with the primary goal of minimizing the environmental and economic impacts of planned and un-planned incidents and events and to improve roadway safety.

ITS is a series of integrated computer and communications technologies – eras the INIC uses to war Island's busy highways.

deployed at strategic field locations and controlled from a central operating station – that enable transportation systems to operate more efficiently. The hub of the traffic management center is the TMC itself – located in the RIDOT head-quarters building in Providence – where detection, communications, and control of ITS resources is coordinated with information on incidents shared among all technologies. Within moments of an incident, information is available using all resources accessible by motorists in the car, on phone and on the Internet.

The principal areas addressed by RIDOT's ITS program are: Incident Management, TMC Capital Improvement Projects, ITS programs and initiatives including Advanced Traveler Information Systems, Advanced Traffic Management Systems, continued support for TMC operational requirements, and ongoing service contracts.

Deployment of additional ITS field devices continued in 2007 as the TMC increased the number of closed circuit video cameras to 90 strategic locations throughout the state. The TMC continued an emphasis on updating selected field equipment and enhancing equipment maintenance and record keeping. As part of the TMC strategic planning program, an ITS Deployment Plan was produced to guide the program development in fiscal years 2008 through 2013.

In addition to managing routine highway incidents and events, the TMC assets were also used to support several other special events and projects. This includes the public awareness and safety messages relating to the Iway construction project and the opening of the new Providence River Bridge. When RIDOT set a weight restriction for the Pawtucket River Bridge, affecting heavy truck traffic, TMC

devices were employed to provide early warning and direction to minimize any potential negative traffic impacts of the detour. The TMC's Dynamic and Variable Message Signs played a major role in this effort, and will remain providing messages about suggested detours until the weight restriction is lifted or the bridge replaced.

The message signs also were used to alert the public and divert traffic during a terrorist exercise managed by the Providence Emergency Management Agency at the Rhode Island Convention Center in Providence.

Center in Providence.

The signs and the Highway Advisory Radio System are employed on a regular basis to provide and support public safety and awareness campaigns such as "Click it or Ticket" and "You Drink and Drive. You Lose." In conjunction with the R.I. Department of Environmental Management and the R.I. Public Transit Authority, the TMC employs ITS informa-

tion devices to alert the public of dangerous ozone levels in



An example of one of the many traffic cameras the TMC uses to watch over Rhode Island's busy highways.



An operator in the TMC watches over two large screens that allow a quick glance at many of RIDOT's 90 traffic cameras.

the summer and to provide information relating to alternative transportation choices. The TMC also notifies the public of the availability of free RIPTA bus services on Ozone Alert Days. The TMC also stands ready to work with the R.I. State Police to use message signs and all other field ITS devices in the event of an Amber Alert for an abducted child. Fortunately, no Amber Alerts were issued in 2007.

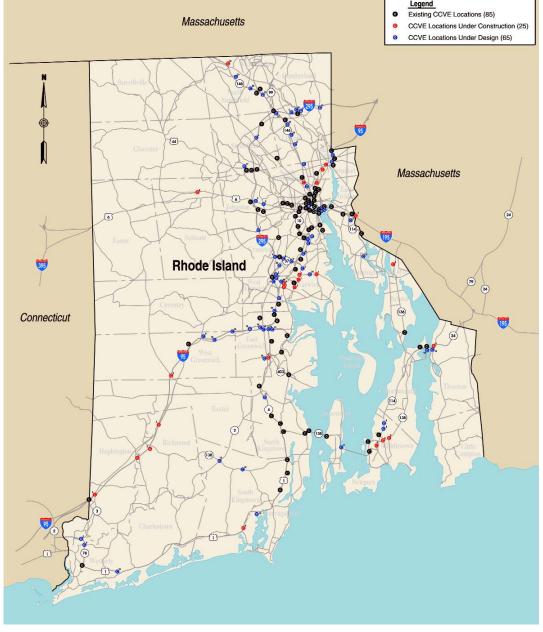
The TMC collaborates with other programs and agencies through several information and technology sharing programs. The TMC video sharing initiative enables key stakeholder agencies to view streaming images from the TMC's closed circuit video equipment. This initiative supports routine operations for other RIDOT sections such as Maintenance and Construction as well as emergency operations for agencies such as the State Police, E-911, and the City

of Providence. Agencies are able to use the awareness gained through the video images to make decisions that improve response and reduce incident clearance time. This awareness also helps stakeholders plan and manage projects to minimize the impact on traffic.

Another collaborative effort is the TMC's involvement in the Incident Management Task Force. The Incident Management Program was initiated in 1991 to minimize the economic, environmental, and safety impacts of planned and unplanned roadway incidents. It has evolved into a standing task force representing multiple cities and towns, agencies, and stakeholders who evaluate incident management techniques encourage sharing of resources in an effort to continue to improve incident management safety and efficiency. The task force now meets every eight weeks in the TMC. The task force has evolved into an action-oriented work group composed of representatives from RIDOT, State and local emergency management, the R.I. Department of

the R.I. Fire Marshal's Office, the R.I. Association of Chiefs of Police, the R.I. Association of Fire Chiefs, Rhode Island E911, the R.I. Public Towing Association, and the Federal Highway Administration.

Going into 2008, the Transportation Management Center will continue to expand coverage and capability through the addition of new ITS field devices, upgrading outdated Variable Message Signs with newer, more modern ones, and upgrading the communications capability to control the message signs more efficiently. The TMC will continue to foster partnerships with public and private stakeholder agencies and organizations. By encouraging these partnerships, RIDOT has dramatically improved operational capabilities and expanded the distribution of timely and accurate traveler information.



Administration, State Police, The map above shows the location of existing and future traffic cameras in Rhode Island.

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Click on the names below to contact those individuals by e-mail

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#### RIDOT 2007 Annual Report

#### Editor:

Charles St. Martin

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Dana Alexander Nolfe, Chuck Aube, Heidi Cote, Fran Segerson, Richard Nolan, James Warcup, Francisco Lovera, Steven Kut, and Jose Lima.

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Page 5

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Page 6

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Page 7

Map: RIGIS

Page 8

Top center: Fran Segerson Bottom left: Chuck Aube Bottom right: Richard Nolan

Page 9

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Page 11

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Page 14

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Page 15

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Page 16

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Page 18

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Page 19

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Page 20

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Page 21

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Page 22

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Page 23

**Top right:** Dana Alexander Nolfe **Bottom left:** URI Transportation Center

Page 26

**Top right:** Fran Segerson **Bottom left:** Heidi Cote

Page 27

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Page 28

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Page 30

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Page 31

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Bottom left & right: RIDOT Bridge staff

Page 32

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Page 34

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Page 36

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Page 38

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Page 39

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Page 40

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Page 41

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Page 43

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Page 45

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Page 46

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Page 47

**Top left:** RIDOT file photo **Bottom right:** VHB Inc.

**Back Cover** 

Photo: Charles St. Martin

#### RIDOT Quick Facts

#### Miles of Roadway

State owned: 1,102 Owned by others: 5,421 Total: 6,523

#### Lane-Miles of Roadway

 State owned:
 2,908

 Owned by others:
 10,847

 Total:
 13,755

#### Number of Bridges

(Classified in the National Bridge Inventory)

State owned: 623 Owned by others: 149 Total: 772

Number of Traffic Signals

777

Number of Employees

-696

#### **RIDOT Funding Sources**

(In millions of dollars)

 State (Gas Tax):\*
 \$97.2

 State (Bonds):
 \$40.0

 Federal:
 \$212.0

 Total:
 \$349.2

\* 20.75 cents of 30-cent gas tax allocated to RIDOT

